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# PC PowerPlay



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APOCALYPSE LOOKED  
SO GOOD AND PLAYED  
SO WELL

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ISSUE  
#247

JANUARY  
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## ON THE COVER

### **DIVINITY: ORIGINAL SIN II**

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Can Larian Studios strike gold again with this Kickstarted sequel?





## REVIEW FALLOUT 4

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Daniel Wilks and David Hollingworth brave the irradiated future

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Optimise your gaming with Windows 10

**TECH**  
**GIGABYTE GEFORCE GTX 980 TI XTREME GAMING WATERFORCE**  
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The fastest videocard around gets faster





# Merrily on high

What a month. Every Christmas period sees some heavyweight games duking it out for marketplace superiority, but this year is exceptionally dangerous when it comes to wallet casualties. In the space of only a couple of weeks we saw the release of Fallout 4 (a game I have now sunk about 120 hours into and still have quite a ways to go when it comes to actually finishing the main quest), Star Wars Battlefront, CoD: Blops III, StarCraft 2: Legacy of the Void, Assassin's Creed: Syndicate, Just Cause 3 and a few others. It's crazy, not just for the sheer number of huge, hotly anticipated AAA titles coming out in such a short time, but for the fact that so many of them are in direct competition with each other, looking to grab the same demographic. I understand the reasoning behind releasing a game just before Christmas, but releasing in the same window as something that is going for exactly the same market share doesn't make sense to me. That said, I'm no marketer or industry strategist, so there's probably some hidden, quasi-mystical wisdom I am not party to.

On top of the regular releases, there are also the sales to contend with. Steam and GoG slashed the price of a number of games on the run up to Christmas, giving gamers a limited time to purchase titles for a fraction of their usual cost. I, and I assume many of you, have a pretty big pile of shame when it comes to games, both physical and digital. My Steam library has 288 games in it at the moment, eight of those coming from the recent sale. My GoG games list is much smaller, with only 29 games, only one of which has come from a recent sale. Out of my 288 Steam games, I've played maybe 50, and from my GoG list I've played three. Do I plan on playing all of these games at some stage? Of course! Will I? Probably not - there just isn't enough hours in the day to get through that list. Will I continue adding to the lists with new impulse buys? You bet your life. I'd love to be able to blame my compulsive buying of games on marketers, but that would be assigning blame where there is none. There's no real blame at all. I buy games not just because I have every intention of playing them, but also because I believe in supporting the industry that I love. I buy indie games like they're going out of style and support way too many Kickstarter projects to be healthy for my wallet or sanity. I want to see everyone's creativity and I want to see the industry, especially the little guy, not just survive but thrive. 2015 has been a great year in gaming, both financially and in terms of quality. From the looks of everything on the horizon, 2016 is going to be as good, if not better. Have a good non-denominational year end holiday period and we'll see you in the New Year.

Daniel Wilks  
Grumpy Santa  
@drwilkenstein

## QUOTES OF THE MONTH

"Google 'consenting penguin', I dare you"

"Head dicks"

"First experience with nasal douching"

AUSTRALIA'S #1 PC GAMING MAG  
**PC PowerPlay**

### EDITORIAL

**EDITOR** Daniel Wilks

[dwilks@nextmedia.com.au](mailto:dwilks@nextmedia.com.au)

**GROUP ART DIRECTOR** Malcolm Campbell  
[mcampbell@nextmedia.com.au](mailto:mcampbell@nextmedia.com.au)

**TECH EDITOR** Bennett Ring  
[bennett@internode.on.net](mailto:bennett@internode.on.net)

**SPACE LORD** Ben Mansill  
[bmansill@nextmedia.com.au](mailto:bmansill@nextmedia.com.au)

**INTERN** Chris Pirina

**OTHER INTERN** Nathan Davies

### CONTRIBUTORS

James Cotte, Alex Mann, Terrence Jarrad, Meghann O'Neill, Josh Lundberg, Jordy Bertram, Theo, Morte, Nathan Lawrence, Dan Staines, Joab Gilroy, Katie Williams, Heidi Kemps, Patrick Stafford, Ashley McKinnon, John Robertson, Hasan Ali Almaci

### ADVERTISING

**GROUP NATIONAL ADVERTISING MANAGER**  
**GAMING**

Cameron Ferris

[cferris@nextmedia.com.au](mailto:cferris@nextmedia.com.au)

☎ (+16 2) 02 9901 6348

M: 0405 356 419

### ACCOUNT MANAGER

Sean Fletcher

[sfletcher@nextmedia.com.au](mailto:sfletcher@nextmedia.com.au)

☎ (+16 2) 02 9901 6367

M: 0402 585 124

### ADVERTISING TRAFFIC

Alison Begg

[abegg@nextmedia.com.au](mailto:abegg@nextmedia.com.au)

☎ 02 9901 6346

**PRODUCTION MANAGER** Alison Begg

**CIRCULATION DIRECTOR** Carole Jones

### SUBSCRIPTIONS

[www.mymagazines.com.au](http://www.mymagazines.com.au)

**TOLL FREE ☎ 1300 361 146**

Locked Bag 3355, St Leonards NSW 1590

### COVER DISC ENQUIRIES:

[dwilks@nextmedia.com.au](mailto:dwilks@nextmedia.com.au)

☎ 02 9901 6100

**nextmedia**

Building A, Level 6

207 Pacific Highway

St Leonards, NSW 2065

Locked Bag 5555,

St Leonards, NSW 1590

### CHIEF EXECUTIVE OFFICER

David Gardiner

### COMMERCIAL DIRECTOR

Bruce Duncan

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## THIS MONTH...



**DANIEL WILKS**  
Made three magazines  
[@drwilkenstein](#)



**MALCOLM CAMPBELL**  
Made four magazines



**BENNETT RING**  
Cracked Star Wars puns  
[@benнетring](#)



**JAMES COTTEE**  
Paid tribute to Roddy Piper  
[@j\\_cottee](#)



**MEGHANN O'NEILL**  
Cried  
[@firkraags](#)



**JAMES O'CONNOR**  
Waited for Christmas  
[@jickle](#)



**BEN MANSILL**  
Got older



**NATHAN LAWRENCE**  
Got even beardier



**CHRIS PIRINA**  
Started interning



**DAVID HOLLINGWORTH**  
Roamed the wasteland



**ALEX MANN**  
Went back to Melbourne



**CAMERON FERRIS**  
Forgot his computer  
[@pcpowerplay](#)



**SEAN FLETCHER**  
Got a cold

# FRONTEND



## INTERVIEW

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The quest to faithfully remake a classic



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One of the best games of 2014 gets a bigger, even more ambitious sequel



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The best of independent development



### 32 10 to Watch

The most exciting games on the horizon



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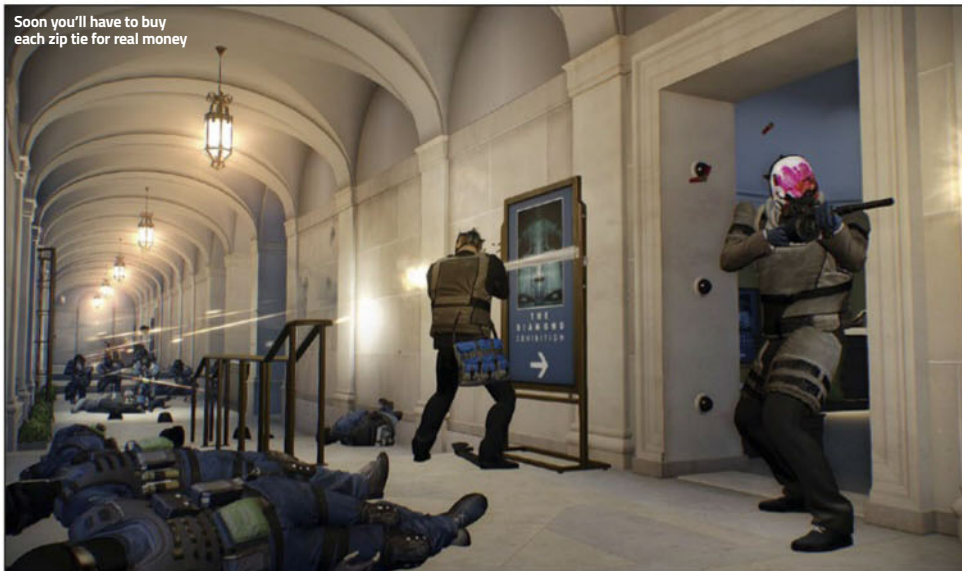
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# Inbox

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## LETTER OF THE MONTH WINS!

Write in to PCPP with your rants, considered opinions, and endless run-on sentences of pure awesome. The address is [letters@pcpowerplay.com.au](mailto:letters@pcpowerplay.com.au). Each letter read by hand!

## LETTER OF THE MONTH PAY OUT

Hello, I am an American Payday 2 player. Your payday 2 review score is high and very visible on Metacritic's site. Because of this, I would like to request Payday 2 be re-reviewed if your team has the time. Microtransactions and very unpopular decisions regarding the Completely Overkill Pack has ruined the reputation of the game at the time. Lowering the critics' Metacritic score might be some way to get the attention of the developers that the game has taken a turn for the worse.

**Steven Snyder**

Hi Steven – we've considered doing re-reviews for patches but unfortunately, due to the nature of magazines they aren't really feasible. We work on a long lead time, so by the time we can get around to writing a follow-up on a game, the changes that were such a problem could be a thing of the past or could have been substantially changed again. The other problem with the idea of re-reviewing games is that we could never catch up. There would always be things we'd want to change and look at again in hindsight for patch missteps, updates that brick some systems and myriad other problems endemic

in an open environment like PC gaming.

*For the most part, magazine content is set in stone as soon as it goes off to the printers. The issue after something goes to print we can usually print a retraction or an opinion piece related to a game or specific issue, but after that the gap between initial printing and the current issue becomes too long to do anything particularly meaningful outside of a feature or retrospective. The online environment is much more malleable, with writers being able to add to, re-edit, re-score or rewrite a review. Of course, that itself comes with a host of problem – you only have to witness the controversy when Polygon changed the scores of some reviews earlier this year to see that even in a dynamic live environment looking back isn't always welcome.*

## DOWN

Feel free to pass on to Josh Lundberg how good his article was in the latest issue of PC Powerplay magazine. Easily the best article he's written in the magazine and arguably the best article that's been in the magazine this year. I was doing a head count after I read that article and most of my friends are gamers and I know quite a few of them



## FEEDBACK #245

► **ROGE:** Mushroom head dude looks strange

► **Brent Ackerman:** Good issue overall, but did you really need to waste so many pages on Christmas presents?

► **Karen Weeks:** I can't agree with Wilks about Sword Coast Legends. The combat isn't the best but it's better than a 5 for sure.

## MAKE YOURSELF HEARD!

f [facebook.com/pcpowerplay](https://facebook.com/pcpowerplay)  
 www.pcpowerplay.com.au

have issues with depression. I personally don't and I feel very fortunate about that, knowing what my friends go through with it. Is there something about gaming that attracts someone with who suffers from depression?

I don't know, just putting that out there!

Regards

**Mitchell Hall**

P.S Thank you for the Xmas Gift guide this year. Again your best ever guide and you've all had a good 2015.

*We honestly couldn't say. Anxiety and Depression aren't rare, so it's not that strange to see so many people in gaming dealing with them. In our bunker alone, we have three people living with different mental illnesses. The escapist aspect of gaming may draw people dealing with anxiety and depression to gaming, or maybe the sense of control that comes with games appeals to some people that lack control over certain parts of their lives. Whatever the case, we're really keen to see a far ranging study on gaming and mental illness (as long as it's not funded by nuts who want to blame games for gun violence).*





## CHRIS 42, NEWCASTLE

This month's MY PC brought to you by

CREATIVE

### 4 MOST IMPRESSIVE FEATURES

#### Race Rig:

- Fully kitted Fanatec race hardware including base, Formula and GT rims, pedals and shifter.
- Modded Thrustmaster TH8RS shifter as my handbrake. Nice and close to the wheel for easy Dirt Rally slidin' action.
- Bucket race seat. For that authentic feel :)
- Siminstruments Dash. Gives me all the telemetry data as I am racing. Revs, lap times, tyre temps, you name it.

#### Main Rig:

- Full mixing desk
- Mic on boom arm. Spider-web holder to cut down on the surrounding noise.
- 30" Dell in the middle.
- Overclocked 3770K

#### LAST UPGRADE:

**Race Rig:** Yesterday! Dropped a i5 6600K into a Gigabyte Gaming 7 Mobo, G-Skill DDR4 and water cooled using the Corsair Hydro H110i GTX.

**Main Rig:** Nvidia GTX 980, perfect for the Fallout 4 frames :)

#### FAVOURITE FEATURE:

**Race Rig:** It's 100% used for racing sims. It doesn't have to double as anything else.

**Main Rig:** The mixing desk is sweet. I've recorded covers, podcasts, backings and voiceovers for home videos, all sorts of stuff.

**WHY SO SPECIAL:** Both rigs are 100% scratch built. I've build PC's all my life and these are my crowning glory. I've got the mancave set up just right now.

1. Three monitors for racing perfection
2. The best wheel on the market, with GT and Formula rims
3. Nothing says fast like a bucket seat
4. Sweet mixing desk
5. 30" is never enough
6. So goddamn jealous

## CHRIS WINS!

Thanks to the good people at Creative, Chris scores himself a ZxR sound card. Enjoy!



**WANT FREE STUFF?** Send your MyPC entry today to [mypc@pcpowerplay.com.au](mailto:mypc@pcpowerplay.com.au). Include the four most impressive elements of its hardware, your last upgrade, your dream upgrade, your favourite feature and what you think makes your PC special. Make sure to include your name, age and location. And last but not least, attach a 5MP or bigger image of your PC! No camera phone shots, and make sure it's in focus!



## LENOVO AND RAZER TEAM UP FOR NEW DESKTOP PC DESIGNS

Not exactly a match made in heaven, but one that is certainly intriguing.

Lenovo and Razer are, all of sudden, best friends. The relationship's starting out pretty chilled, but it's going to ramp up to something pretty interesting over the next year or two.

The two announced their partnership over the weekend by revealing a prototype Lenovo Razer branded gaming desktop at BreakHack Winter 2015, ahead of a full unveiling at CES.

The partnership is going to deliver a

lot more devices, too. For now Lenovo and Razer seem content to simply co-brand Lenovo Y Series gaming machines (most likely with Razer peripherals and a lot of green branding), and

to merge Lenovo's proven supply chain with Razer's gaming know-how.

But in the future, and the companies are looking to produce entirely new designs and products, focused around immersive gaming experiences.



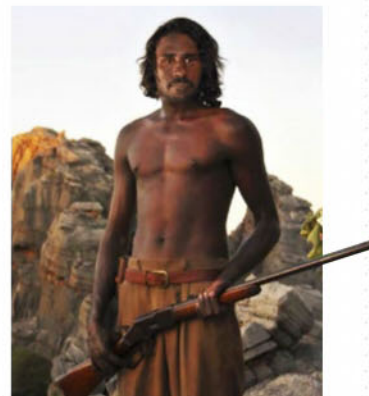
## NEW MOD FOR CIV V LETS YOU PLAY AS KIMBERLEY ABORIGINALS

Fight back against colonial oppression!

You've got to love modders. Fallout 4's barely been out, and already tweaks, mods, and community fixes are starting to appear. Modders are tireless in their drive to create new content for the games they love, and Steam Workshop user TPangolin has just created a whole new civ to add to Civilization V.

Even better - it's all about indigenous Australians.

The Kimberley Aboriginals civ lets you take on the role of Jandamarra, the leader of the Kimberley People. He was a famous guerrilla fighter, and the civilisation includes units like Trackers and the specialised Trepanger Camp, which is a



special kind of harbour.

And if you really want to re-write history, you can also get TPangolin's Australia Civilisation, and really show those settlers what's what!



## ROCKET LEAGUE RECEIVING PORTAL DLC

Two great flavours, together at last!

Rocket League developer Psyonix has announced a partnership with Valve to deliver free Portal-themed DLC to its fans. The content will become available on December 1st and players will be able to obtain the items just by playing the game, as players are rewarded at the end of every match.

The DLC will consist mostly of customisable upgrades for the cars and will include a cake (topper), propulsion gel (rocket trail), repulsion gel (rocket trail), aperture laboratories (antenna), cake sticker (antenna), companion cube (antenna), personality core (antenna) and PotatOS (antenna).

Yes please!



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## ASUS LAUNCHES NEW GL552 ROG GAMING LAPTOP

Gaming on the go? Or just a really good heater for your lap?

Asus has just expanded its mobile gaming range with the new 6th gen Core-i7-powered GL552 laptop.

It may not sound exciting, but under the hood it's all business. A Core-i7-6700HQ CPU is the main muscle, backed by a GTX 960M with up to 2GB of GDDR5 VRAM.

This feeds shiny pixels into a 15.6in 1920 x 1080 IPS display, and you can control some of those pixels via low-profile, high-response backlit keyboard. The GL552 also boasts GameFirst network settings, up to 1TB of storage and a 128GB SSD. And

if you like the idea of Samsung's latest M.2 drive, you can even easily upgrade thanks to a slide-off panel that reveals the M.2 port and memory slots.

The ROG GL552 is available now at Harvey Norman, Dick Smith, and JB Hi-Fi, from \$2099.



## ASROCK'S NEW FATAL1TY Z170 PROFESSIONAL GAMING I7 IS FOR 'SERIOUS GAMERS'

Frivolous or joyous gamers need not apply.

Asrock's making some pretty big claims about its new Z170 motherboard - apparently, the Fatal1ty Z170 Professional Gaming i7 is the "highest performance gaming motherboard available".

Them there's fightin' words!

While we can't speak to that claim just yet, we do know the mobo's specs. It boasts 12-phase power for stable delivery, the usual 6th-gen CPU and DDR4 support, and has

three native display outputs - DVI-D, HDMI, and DisplayPort. It also has four PCIe 3.0 x16 slots.

Dual gigabit Intel LAN chips take care of networking, and Asrock's Purity Sound 3 handles audio. Storage and data is pretty well represented too,

with ten SATA3 connectors, three SATA Express connectors, and three M.2 slots for those who really want fast transfer speeds.

There's no local pricing or availability just yet.



## FALLOUT 4 UPDATES COMING TO PC FIRST

Well that's a plus!

Bethesda has revealed its patching and update cycle for Fallout 4, and if you're playing the game on PC, it's good news for you!

After going into beta testing, Fallout 4 patches will roll out onto PC before console.

Bethesda's made the announcement on the Bethesda Blog, describing that even though Fallout 4 is pretty solid - and compared to the early days of Fallout 4, it really is amazing - it's a big world with a lot of features.

"It's true that the freedom our games offer you can lead to unintentional consequences that are sometimes bad, when the

game combines too many unexpected elements at once. Given the scale and complexity of the systems at work, especially when allowing you to build your own settlements, we're happy that Fallout 4 is our most robust and solid release ever, and we'd like to thank our amazing QA staff who worked as hard as anyone to break the game so we could fix it during development. But a hundred testers will never replicate the many millions playing the game now, and we're hard at work addressing the top issues."

The first beta patch is out now, and more are sure to come.





It's a work of art.



# Thermaltake Core P5

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# So real I want to break it

Just being there never comes easy...

Once again, Bethesda has created a deeply captivating world to live in. I'm in it, you are too, probably. *Fallout 4* shot straight to the top of the Steam charts, and it's locked onto that position even while others – including a new *Call of Duty* game – come and go. My Steam friends' now-playing list went from a cool variety of interesting games, transforming overnight into a long column of '*Fallout 4*' and not much else.

I saw telltale signs of total and complete addiction. Like the several friends playing *Fallout 4* at 7am on Sunday morning. Or my racing group all jumping straight into the Commonwealth after a big championship decider when normally they'd all spend hours poring over a race replay. The guy who only ever plays *Elite: Dangerous* has now swapped one catatonically mesmerising fantasy world for another, and that's no small feat. While the mate who somehow manages to get by on a four year old graphics card suddenly decides to throw a grand at Nvidia just days after swearing he's ok for at least one more generation.

How come? There's no multiplayer in it. None at all. Ok. The gameplay structure we've played before – and how. It's *Skyrim*. It's *Oblivion*. The game engine is hyper-familiar, too. It's funny how a rock texture can impart a feeling of coming home, but there you go. It's a character development sim with the world's worst inventory management system, one we've clenched fists at countless times before. *Fallout 4* is nothing new. We've been there and done that. Done it all.



But by gum it's a triumph of PC gaming. It's a winner because it appeals remarkably widely to so many gamer types, each seeking a different flavour of personal satisfaction. The reasons why one plays a game so rich in story, visuals, ambience and action goodness overlap, but so rich is the experience that it caters well to a fascinating variety of personal desires.

I personally love the 'freedom of pace' most of all. Knowing that a really big world lies before me, with its inhabitants carrying on as if I wasn't even there, is a sublimely sweet feeling. Sometimes I like being a nobody in

has its corridors of story-driven focus that put a temporary stop to doing nothing, slowly. But there's always a sense that you can pull back and not feel like there's a bright spotlight on everything you do in the game. It's humbling in a way, which makes it all the more impactful when you pull an epic hero moment.

In trying to appreciate the game this way, it does become especially poignant when mechanic exploits tempt one with their dishonest ways. Who didn't have Dogmeat fetch the Cryolator at the start? It's interesting that a game with such freedom almost demands that we take advantage. Despite the epic amount of work the devs put in to create an illusion of ever-present peril, anything you desire is a tilde keystroke away. The same tilde key I accidentally hit all the damn time when in combat and want me some VATS action... The temptation is a huge. Unfairly huge. I know the use of the console key can be disabled, but how many of you kept it accessible as you started playing 'just in case'?

Look at the first mods to come out, of the inevitable thousands which will follow a similar path. At the top of Nexus' most downloaded list is the one that displays all the conversation choices, removing the convincing social ambiguity that adds life to otherwise stale character models and canned dialogue. Do we do this to improve our chances, or are we vicariously living a life where every advantage should be gained at the expense of relishing the experience? Are you prepared to burst the bubble a little or a lot? **PC**

## Who didn't have Dogmeat fetch the Cryolator at the start?

a big world. I love how I can take my sweet time wandering around before making my decision to initiate a new conversation, and likely, hours of deeper involvement with people that need me. But also, to break away, go stand on a high rock and gaze over a horizon I can't see the edge of, my dog at my side, digging the serenity right along with me.

A single player experience like this is getting harder to find, and that's crazy because this is the bedrock of PC gaming. We wanted 'go anywhere, do anything' games since the very beginning. We allowed ourselves to think that bog-standard FPS games offered a measure of that freedom, when in truth they corralled the player along a linear path. Sure, *Fallout 4*



**BEN MANSILL**  
feels lucky



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PLE Computers (WA)  
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## Total War: Warhammer

**DEVELOPER** CREATIVE ASSEMBLY  
**PUBLISHER** SEGA  
**DUE** 2016  
[warhammer.totalwar.com](http://warhammer.totalwar.com)

Almost everything we've seen of Total War: Warhammer so far has been battles, but now we finally have a chance to see the Campaign Map. It appears to be a lot more narrative than previous Total War games, with scripted locations and events. We should have hands on early 2016, so we'll be able to find out then.





+  
*the big  
picture*  
+



# Hell Comes to Frog Town

Wasteland 2 is a game about making difficult choices, a fact only magnified by the new Director's Cut...

**W**asteland 2 is a game that was made to be played twice. It's an impressive feat of game design, given that a single play-through might take you a good 100 hours. On a literal level, this replay-ability is a function of content. Early in the game your team of Desert Rangers receives two distress calls simultaneously, and you can only respond to one. Rescue one town, and you get an exclusive NPC companion – but the other town gets massacred, and they send you some rather hurtful radio messages before they perish.

There is an itch that can only be scratched by saving the other town to see what happens. Yet the game begs to be replayed on a meta-level, too. The combat mechanics of Wasteland 2 are largely opaque, and it can take hours of forum lurking just to tease out how you should go about optimising your rangers at the time of character creation.

The most important stat by far is Combat Initiative. With a high enough CI a Ranger will always get to shoot first, and will get to shoot twice as often as the raiders and robots he's exterminating. The most effective weapon class by far is Assault Rifles. So in theory you should create a squad of four AR users with attributes optimised for CI and Action Points.

But this min/maxing comes at a cost. Certain story choices are locked off if you lack the requisite speech skills, loads of goodies are denied you if you lack skills like Lockpicking and Toaster Repair, and some of the best NPCs can only be recruited if your team's combined Charisma score is high enough. So ideally you'll want to balance your squad's raw capacity for murder output with your penchant for role-playing



– especially if you're trying to create distinct personalities for your characters.

This meta-game consumes me. I have spent more time planning the party for my second play-through than I put into preparing my 2015 tax return.

To fit the 1980s post-apocalyptic theme of Wasteland 2, I have envisioned a team of 80s-era All-American Shitlords. To make things interesting, there will be only one AR user on the team: Oliver North (with the Psychopath Quirk, for a handy damage multiplier). Machine guns aren't nearly as versatile or effective as ARs, but they're a more fitting choice for my heavy-hitter, Jesse Ventura. P.J.

■ To fit the 1980s post-apocalyptic theme, I have envisioned a team of 80s-era All-American Shitlords ■

O'Rourke will be my 'skill mule'; highly intelligent, but largely ineffectual in a firefight. And their charismatic leader? A dab hand at demolitions who has sworn to bring justice to the badlands, and to Make America Great Again.

I've got it all figured out. The only question is whether I should jump in and start playing now that the first major patch for the Director's Cut has dropped, or if I should wait for the second patch. Or maybe the third. It took five or six patches to get the kinks out of the vanilla release of Wasteland 2, and for all my praise I'm not sure if I have a third play-through in me.

Don't get me wrong – the Director's Cut is a breakthrough for the series. With its Perks and Quirks and other

refinements they've finally nailed down what the Wasteland experience should be. And with their big new studio opening in New Orleans, they have the sausage machine they need to crank out sequels ad infinitum. Yet 1980s-themed post-apocalyptic burn-out could be a real problem for inXile in the not-to-distant future, seeing as they're bringing back another fondly-remembered game from that era: Autoduel.

Based on the board game Car Wars, Autoduel was part Mad Max, part NASCAR. Getting the balance of top-down car combat and post-nuclear role-playing right will be tough, but I'd argue that an even bigger challenge will be nailing the aesthetic. Grime and rust and filth worked for Fury Road, but to keep their brands distinct they could go to the other extreme: neon and lasers and endless rows of palm trees. Picture it: Hotline Miami with cars. Moonbeam City with nukes.

They could go overboard and render the entire game in CGA, with its searing vaporwave palette of black, white, cyan, and magenta. I often wonder what the world of gaming would be like if technology had stagnated in the 80s, and programmers had no choice but to squeeze ever more interesting games out of the hardware available. From time to time a game like Downwell comes along, hinting that such a world wouldn't be that bad.

However it looks, Autoduel will do fine so long as Brian Fargo sticks to his strategy of catering primarily to rusted-on core gamers. Fan obsession does not translate readily between demographics, let alone nationalities, as we've seen with the hasty cancellation of Borderlands Online... **PC**



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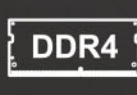
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# THE DOMINATORS

Explore. Expand. Exploit. Exterminate. The classic 4X formula returns with the upcoming Master of Orion remake. We talked to executive producer **Randy King** about how the company behind World of Warships is bringing a strategy classic into the 21st Century...



**WHO** RANDY KING  
**WHERE** WARGAMING  
**WHY** MASTER OF ORION

**A**t the recent PAX convention in Melbourne we had a chance to sit down with Randy King, executive producer of the upcoming remake of Master of Orion. Wargaming.net founder Victor Kislyi played the original game obsessively back in the 90s, and he in part credits this experience with giving him the drive to build a world-beating strategy game company.

When we caught up with Randy King behind closed doors at the Wargaming booth, he pointed out that this is not the first time his company has ventured into this field. “Wargaming actually has a past in turn-based games. We have twelve turn-based games that were before World of Tanks.” Victor still plays turn-based strategy games to this day, especially Civilization, but MoO is his all-time favourite. When the opportunity arose to buy the rights, Victor acted without hesitation. From there, Randy was given a straightforward, but sacred mission statement.

“He wanted us to stay true to the original games, so that his kids could experience the same game he fell in love with. So we’ve strived to stay as true as we can. And of course, not only is he helping us, but the original core team that developed the original games is helping us, and they’re giving us feedback all the time, saying ‘No, this is wrong. We don’t like how this is playing’, and ‘Yeah, we love this’, and so forth.”

Rather than simply imitate or emulate the past, Randy’s team has been instructed to include all the conveniences and control optimisations that contemporary gamers have come to expect – and they’re not just drawing on space strategy games. “We’ve played them all. Including Civilization. Which is huge. Our tech tree is actually similar to Civilization.”

Many elements of play, such as directing where scout ships should go, can be set to auto. “The colony management is all

automated. We’re looking at other things that we can automate, for the new players that don’t want to manage everything.” That includes the in-depth warship customisation features. “You actually can ignore it. Because when you create ships, it uses the default settings for each one of them, and you don’t have to go in and customise your ships and create new designs and implement them in to your process. You don’t have to do it. In fact, I don’t do it.”

Yet that doesn’t detract from the depth of managing your star fleets, as your various classes of warships all have distinct roles. “If you send over a fleet together, they all go at the slowest speed of your slowest vehicle. If you send them individually, some will get

■ ■ He wanted us to stay true to the original games, so that his kids could experience the same game he fell in love with ■ ■

there sooner than others. Especially if you’re being attacked and you don’t have anything there, and you need to get somebody there quickly, even though you know you’re going to lose them. Just to get the other race engaged, you might want to send your frigates up there first. Get ‘em there quickly, while you bring up your destroyers, or your battleships. I’ve done that, too.”

You’ll get a definite feeling of progression as scientific advances directly translate into more advanced firepower. “As you research tech, you’ll get bigger and badder engines that get you there faster and faster, and if you take the Orion planet, there’s a technology there that gives you instant flight, which gets you from location to

location in one turn. Which is wonderful. I love that tech.” Ah yes, Orion. Hidden somewhere in the galaxy, this enigmatic world is difficult to conquer, but it holds a bounty of precursor ultra-tech that can definitely skew the odds in your favour.

Beyond the classic playable alien empires like the shape-shifting Darloks and the reptilian Sakkra, there is a smattering of independent worlds inhabited by oddball races, including, for example, Slylandro-like intelligent bags of gas. “Our narrator explains who they are whenever you meet them, and so you get to hear a little bit about who they are. Your interaction with them will be simply: a request. You can actually go in and take over them, by invading. That’s not received very well within the Independent Planet Community.”

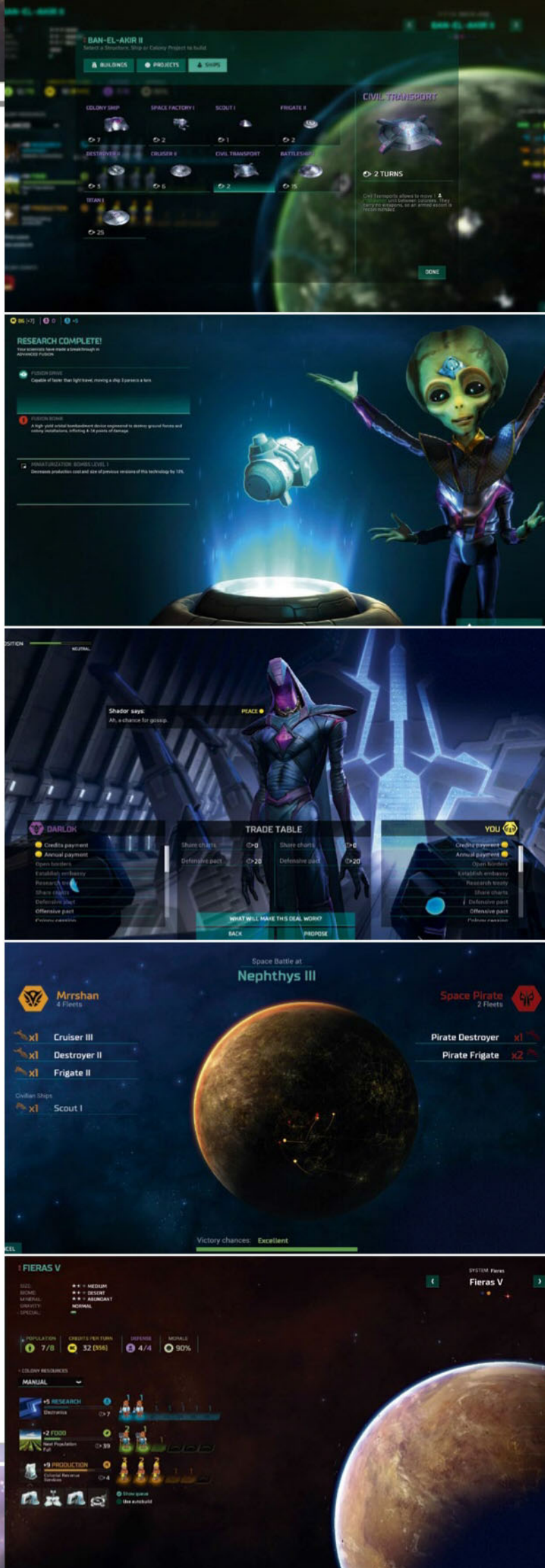
Even simply surrounding their worlds is enough to rile them. “If I go in and there’s an independent colony within my empire, and I blockade everything out, so that nobody can get in, I also piss off that independent colony, because I just stole space that they believe is theirs. And they get pissed off at me. It’s like: ‘Oh. Great. Thanks.’ So sometimes I don’t care about that. So fine. You’re going to get pissed off at me? I’ll invade you and take you over.”

“Depending on how you want to play the game, with the different pathways to victory, you have to be careful how you treat the independent colonies. I don’t care! Because I never win in the diplomatic realm anyway [laughs].”

Beyond the familiar victory conditions like Conquest, it’s also possible to set a turn limit when you begin a game. If no victory condition has been met by, say, turn 500, then a winner will be calculated based on an aggregate of their progress.

Wargaming is also hard at work on solving the perennial problem afflicting all 4X games: how to manage late-game complexity. “We’ve got some things coming, because





we're actually dealing with that right now. We have a play-test studio that is actually play-testing our game. Often." Could Stellaris-style randomised catastrophes be one way to address this issue? "Random events are already in the game. And I hate them. [Laughs]."

To demonstrate another major new feature for the MoO remake, Randy loaded up a game that was well underway, and showed us a set of jagged graphs that charted progress over time in terms of population, wealth, and so forth. These can be brought up for all races at any time. "And here's the neat thing that I can do. What if I made a catastrophic decision right... here..." He picked an arbitrary point about half way through the game. "...and I did something really stupid, I wish I could go back and change my mind." At a click of the mouse, a hundred odd turns of game time were deleted. "Bingo! I now lose everything that I've done from there going forward, but I can start over."

From what we saw, this remake is shaping up to be a quintessentially Vanilla MoO experience – but the very best quality vanilla that money can buy. The kind of vanilla they'd stock at Harrods.

Multi-player is still at the design stage, and Randy referred to many desired features as being on the 'back burner'. This is not to say that they are being neglected, only that it will take time to attend to all of them. "We have a lot of ideas of what we could do to this game. In the future. But the first thing is we're going to get the game out there. If it is received well, we will create new versions that have neat things in them that bring other races into the mix.

"One thing that Wargaming is very well known for is its desire to please our customers. The players. They're the boss. So as they play this game, we're going to keep track of everything that they're saying, and what they're doing, and how they like it, and what they don't like. Based on that, we will most likely make changes."

There will not be an open beta, but those who pre-order will be granted early access, and their feedback will be listened to.

As one last little treat in his demonstration, Randy showed us some of the animations for the advisor for the race of bird aliens, the Alkari. Between his vaguely steampunk/scientist attire, his squawks, and the obsequious way he said "Hmmmm!", he bore a striking resemblance to the Skeksis from *The Dark Crystal*. We doubt this is a coincidence.

There were a few specifics that Randy was not authorised to talk about. For instance, we asked if the narrator who sounded remarkably like Michael Dorn was in fact Michael Dorn. Randy could only tell us that the entire game was voiced by "Triple-A voice talent."

The game is so far confirmed for Windows and Mac, with a good chance of a Linux port hot on their heels. "We'll get slammed if we don't do Linux. It's on the backlog. If push comes to shove, Linux may come out a little bit later." As for the launch window, Randy couldn't give us a date, but he could give us a year.

"There's no doubt that the game will come out in 2016. We're not going to have it done in time to make this year. The game is coming out next year. Other than that, I literally will get my throat slit if I say any dates right now."

For more details, visit [MasterOfOrion.com](http://MasterOfOrion.com)

JAMES COTTEE PC



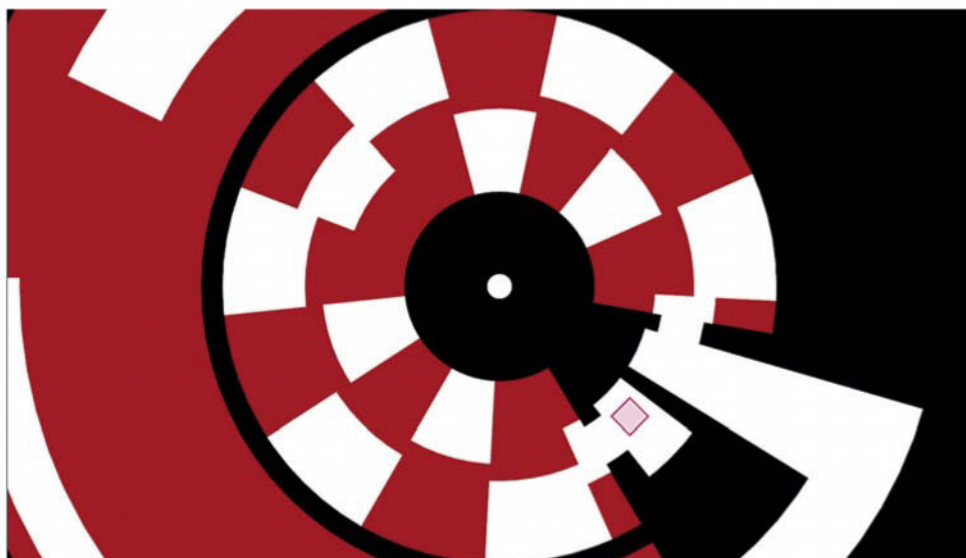
# When it comes to shove

What is black, white and shades of red, all over? Much, much more than a monochromatic art game.

**Y**es, I am one of PC Powerplay's female freelancers and, yes, this column was named after the arrangement of my chromosomes, and the fact I was born early enough to spend the entire 80s with personal computers. But, if we've addressed one thing in the last eight years, it's that stereotyping women who play videogames is pointless and silly, right? I hope so, anyway. So, when I tell you this month's game made me lose a few tears, explain it away as social conditioning and lady hormones if you like, but you might be missing a supremely special experience.

My tissue-reaching moment happened about a quarter of the way through the game. The little pink square; me, had been pushed into a rectangular donut of white, surrounded by black. Red squares were chasing me around the rectangle in a regular fashion and I was able to stay just ahead of them. Rescue was coming, in the form of a lengthening white corridor stretching to meet me. Then, the red squares suddenly changed direction, just like that. I died. It wasn't the first time, but I hadn't been caught so unfairly and that close to escape before.

Of course, the level reset and rotated around, so that the disorientation of my new position caused me to mess up the evasion manoeuvre and die a few more times. Then, the way opened and I pulled myself together, ready to meet some new challenge, also knowing that the game was no longer going to "play fair." In my opinion, the most evocative thing about *Expand*, by Chris Johnson and Chris Larkin, is that it begins by inviting you in, appealing to your curiosity. Soon enough it literally



pushes you into danger and then asks you to willingly go deeper.

Why engage? All the usual game reasons, of course; challenge, learning, kinaesthetic enjoyment, but I also found a real stubborn part of me could not leave the four pink trapeziums sitting helplessly there in the middle of *World unfilled*. Why? It's complicated. In fact, I had trouble leaving them to venture out and try to progress at all. Leading out from the central hub are lonely puzzle levels. One of them, for me, was a shopping centre. At least, as soon as I realised I could just stand and let the escalator push me along, I found the steely resolve required to face whatever was next.

## Black, by contrast, can be as dangerous as red but it is impersonal

Gradually, things get really difficult. I didn't cry again, mostly because I was all, "left, around, whoa, right, right, over there," until I had to take short breaks to rest my thumbs. Levels are named simply and accurately, like *Peril* and *Elude*. The observant player will quickly find the safe places in the middle of a sea of red, or die trying. Familiarity breeds contempt, however, as well as the means to find a safe path.

Contempt? Oh yes, I came to hate red quite quickly. Although you will soon know the places it is weak, its movements feel malicious. I resented having to plan my course around it. Black, by contrast, can be as dangerous as red but it is impersonal, like a car accidentally pinning you to a safety

barrier as you flee across a busy road.

Even white, which was always safe, becomes unreliable. You'll run through corridors, discern between reality and tricks of the light, relying on faith instead. There must be a way out of this ever revolving circle of madness, you just can't see it yet. It's more of the same, it's worse, you can deal with it, you can't. You go back for more, take a break to drink some tea, dodge traffic on the road again and, eventually, beat the damn game. I won't say more.

Oh, and I don't know how I wrote this many words without mentioning the music. When you think, "puzzle game," whatever sound your mind conjures, this is exactly the opposite. It's reflective, piano-heavy minimalism, similar to the works of Michael Nyman or Arvo Part, implemented with FMOD Studio so that electronic, textural layers transition in to enhance intensity as the level gets more perilous. I wondered whether the sadness of the music was actually creating my emotional experience of the game, but it is the gameplay. The role of sound is supportive.

I frequently wanted to stop playing *Expand* and yell, "Stop pushing me!" This is a game that should be hanging on the wall at every contemporary art museum in the country, teaching people that there is more to play than just *Call of Duty* and *FIFA*. I would love to witness the art-going public, gamers or otherwise, experiencing the powerlessness this gameplay evokes. People are different and, despite my initial disclaimer, I suspect my engagement probably was, "a bit uniquely female." But, I challenge you to try it and see what it evokes for you.. **PC**



**MEGHANN O'NEILL** has short hair and notoriously "male interests" but she can appreciate her inner pink square, on occasion.



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# A Collection Aside

**PAX**  
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SPECIAL

The independent gaming section at PAX Australia has nearly tripled in size in two years. How do we know this?

**MEGHANN O'NEILL** conscientiously meets with a designer on every PC game in development. This year, she saw 82 games. Next year, she may need an assistant, especially if 2015's trend towards local multiplayer experiences continues. The many, "couch co-op," titles lent the PAX Rising area a definite, "good game for a convention," feel. Passersby could duel as inflatable men, or race to transform their gelatinous bodies into weapons caches, obliterating friends and winning physical loot. It was fun. But which games could you bring home and enjoy in a more enduring fashion? We chose 12 to feature, both multiplayer and not, and reflecting a range of genres, release dates and price points.

## DEATH SQUARED

DEVELOPER SMG STUDIO  
RELEASE 2016  
PRICE TBA  
[smgstudio.com](http://smgstudio.com)

■ Prior to PAX, SMG Studio had thrown down their gauntlet, via email, daring press to beat the demo of Death Squared. I was like, "Yeah, I'll put you on the list." (It was already long.) When freelance games journalist, Jason Imms, found me and said, "You have to play this with me right now," I came to understand the nature their challenge. Despite the queue behind us, I was soon ready to kick anyone who tried to take my controller away before we'd cracked the demo.

You are a cube, red or blue, and you have to stand on a circle. Getting there requires not falling, being lasered or spiked, and appreciating that your movements may cause these things to happen to your partner. You can pass the dynamic forcefields of your colour, but they can precariously push the other cube. Or, protect your partner from your coloured laser by standing in its way. Just observe how the laser moves as cubes do, or die.

So, is this just a fun thing to do at a convention? Gosh, no. I asked for a build and played the first



ten levels by myself, with one cube bound to each of my controller's sticks. The single player experience is like patting your head and rubbing your tummy, only with hilarious explosions. My husband and I played the last ten levels together, nearly got divorced at level fifteen, but also shared many very genuine, "high five moments."

Death Squared's game designer and programmer, Patrick Cook, says, "It's about communication and coordinating a plan together as two, or four, people solve a puzzle they're each uniquely intertwined in." Inherently, it's not incredibly replayable and I'm personally hoping for a generous volume of carefully constructed levels, maybe an editor, at release. This is the convention experience I want at the con, but also in my living room.

## DEPTH

DEVELOPER DIGITAL CONFECTIONERS  
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[www.depthgame.com](http://www.depthgame.com)

■ Within the many multiplayer games on show at PAX this year, we saw shooting, lasering, pushing, going faster than, leaving to die and taking slow motion strikes at. But, Depth was the only game which involved eating your opponents. (Probably. There were a lot of games.) No, this is not some cute PacMan style thing where you gulp down 8-bit creatures. One moment you're pillaging the treasures of the sea, the next you're looking at the gore floating away from your tibia.

Oh please, play as a diver first. The idea of you doing so is filling me with glee, because I know how terrifying the experience is. The party of four descends through one of the many gorgeous levels with the loot collecting robot S.T.E.V.E. Simply protect it until it has finished its task and returns to the surface. Easy, right? Cue the music from Jaws. You're disrupting the habitat of two sharks and their aim is to ensure none of you escapes alive.

The game supports a maximum of six players online, on these two very different teams, although you can play with bots. The humans buy



increasingly better guns and the sharks evolve during the course of play. As a diver, this feels like playing a tactical first person shooter underwater. Being a wily shark, however, is an exercise in deadly grace, smashing terrain, ramming S.T.E.V.E and grabbing divers, then shaking them furiously with the mouse.

Other game modes, like Megalodon Hunt, allow players to hunt the shark together, taking its place when they kill it and competing for points. Or, play hide and seek with your fellow divers, keeping a bang stick handy for any pesky predators that happen by. So, suit up, what are you waiting for? Community Manager, William Scott, says, "The diver side is based around careful play, where positioning, gun angles, and use of equipment is crucial." And intestines. He left that out. But, definitely intestines.



## FORTS

DEVELOPER EARTHWORK GAMES  
RELEASE 2016  
PRICE TBA  
[www.earthworkgames.com](http://www.earthworkgames.com)

■ What's even more fun than building a tipsy, ramshackle structure? Smashing it. No, wait. Smashing the other guy's with the powerful guns and missiles you have hidden inside yours. *Forts* is *World of Goo* meets *Scorched Earth*. Remember, in the latter, the tense time between choosing your weapons and waiting to see if your opponent could accurately aim theirs? This is *Forts*. Well, that and making sure the entire thing doesn't gracefully topple over, due to poor building or damage.

Honestly, I've had so much fun playing this at home after PAX that I'm not sure where to start telling you about it. Perhaps, if I describe what you can build, you'll start to piece together this amazing experience. So, firstly, the structure's bracing is cheap and flimsy, but you can bolster it with metal armour and sandbags. If you place a gunman inside, it will also require an armoured door that you can open when firing and close when you are being fired at. Shields and a cable, for support, are also available.

The resources for building are mined on flat ground pieces, of which there are deliberately few. Stores increase storage capacity. Power is also required for many structures and is generated by wind turbines and the reactor you are protecting. A battery increases the storage space for energy but will explode if it is hit. The starting units you can place are machine guns to protect against missile strikes, and snipers, who can kill units in the enemy fort, with a little luck.

As well as enhancing aiming arcs for other gunmen, your snipers also paint targets for swarming missiles, which are unlocked after you build a workshop. This also unlocks incendiary mortars, which create spot fires on impact. Should you find your own fort is



burning, you can press R to initiate repairs around your mouse cursor. Frequently, units and structures will be destroyed. For the really, really good weapons, build a factory. I won't spoil them.

In your mind, have you organised all of these pieces into something that works? Batteries to the back, snipers behind armoured doors, triangular struts, missile silo out the back. Now consider the following. Is your structure high enough so that every unit's trajectory can actually hit the other fort in a weak, or valuable, position? What happens if you are targeted with heavy fire at the bottom of your structure? Are you skilled enough at what comes next to take what you have created into battle?

Yes, during the build phase, the opponent will take pot shots at you, especially if you have clumsily left a gunman undefended. In a balanced match, however, you can be pretty sure that, as soon as you are reaching missile capacity, so

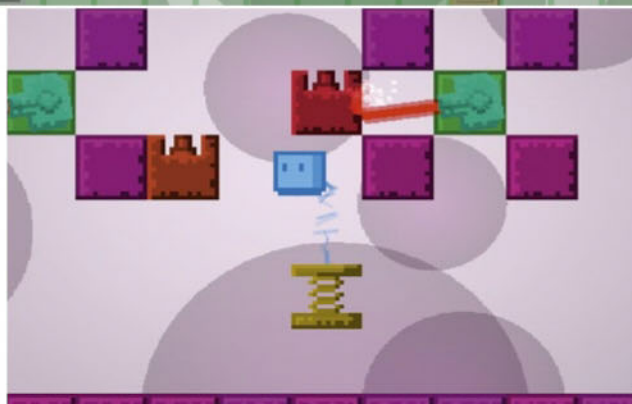
■ Perhaps, if I describe what you can build, you'll start to piece together this amazing experience ■

is the other guy. When everyone is suitably organised, all hell suddenly breaks loose. You have to instruct your gunmen how to aim, revise their trajectories, react to incoming missiles, paint targets and rebuild whatever is falling apart. It's madness.

*Forts* allows for flexible play, but what you make has to work. This is what I love about it. Designer, Tim Auld tells us, "There doesn't seem to be a single best way of playing, which should lead to very interesting matches and high replayability." There are also a variety of game modes, including a small (so far) single player campaign, various multiplayer challenges and a level editor. I can't wait to build, and smash, more forts at full release.







## SHAPEWAY

DEVELOPER PAPERBOX STUDIOS  
RELEASE EARLY 2016  
PRICE \$10  
[www.paperboxstudios.net](http://www.paperboxstudios.net)

■ You know what I love? Level editors. We spend so much time subconsciously, or explicitly, critiquing the game spaces we navigate; this bottleneck meant I could deal with more enemies, this jump was long and I had to time it well. Remember Adventure Construction Set? I spent hours making spy mysteries for my dad. He actually played them, too. The only thing about ACS was, there was a massive time investment involved if you wanted to make something good.

By contrast, The Incredible Machine challenged you to design wacky solutions to problems like, “put the ball into the box,” and test them immediately. If your weird contraption accidentally blew the ball off stage, you would see the problem and then address it. But, TIM’s gameplay was entirely creation. Once you pressed play, you had to watch passively as cats and toasters did whatever it is cats and toasters do.

Shapeway is the platformer you solve by first organising the last several blocks of your tiny level into place, then seeing if your design works by jumping on it. If you place a block that will shatter, you may not be able to wait on it. You may need to do so to avoid the circular saw, attached to the block you placed next. Whether or not you are good at platformers will also influence how many blocks you place, with less providing unlocks and trophies.

Possible routes are endlessly flexible, though you may start to get a feel for optimal placements. If I have one criticism, it’s that there isn’t a penalty for failure as you test your levels. Finding a solution on your first try seems important, somehow. But, as Technical Director, Peter Mandile, tells us, “To me, the most important thing about Shapeway is learning through trial and error,” and it is certainly this balance of build and play that sets the game apart among PAX 2015’s many platformers.

## PARTY GOLF

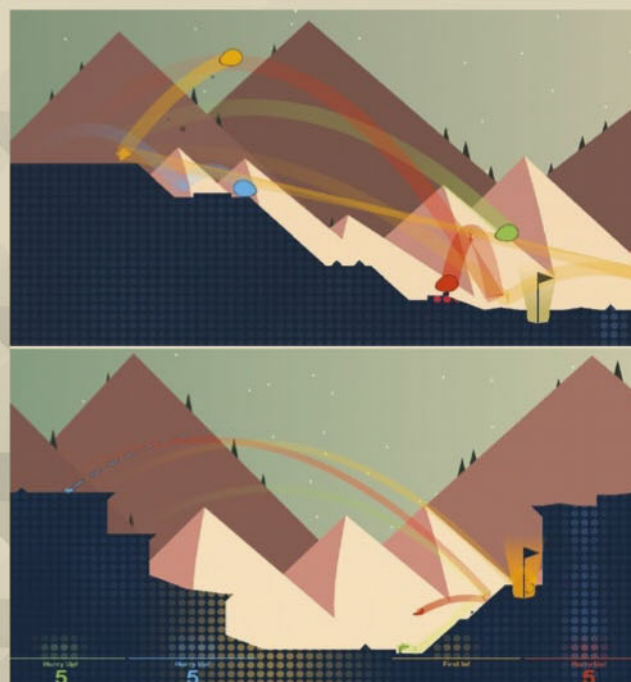
DEVELOPER GIANT MARGARITA  
RELEASE MID 2016  
PRICE TBA  
[partygolfgame.com](http://partygolfgame.com)

■ When I received a pre-PAX email from Giant Margarita about Party Golf with the tagline, “Less Golf, More Party,” my first thought was, “If you have to sell your game by promising less of its core concept, you’re doing it wrong.” I suppose golf games do have a reputation for being boring. This experience, however, is genuinely more like playing non-lethal Scorched Earth (I know, another Scorch comparison) while trading napalm for glitter, nukes for fireworks and setting hills to flashing lights, than actual golf.

It’s 2D and you simply aim and fire your ball at the same time as everyone else. If yours gets knocked off its carefully planned trajectory, well that’s a valid strategy on the part of your opponent. Each round, scores are tallied based on a customisable formula derived from quickest time, least shots, closest to hole and shortest journey. It has its chaotic element, but I felt as if my skill noticeably increased with practice.

Of course, if you get frustrated, you can mess around making balls enormous, extremely bouncy and eggular, to explore some contrasting physics. Is eggular really a word? Shoosh, Meghann, no-one likes “that girl” and this is a party, after all. The many options for size, weight, spin and shape of your ball only scratches the dimpled surface of options available. You can characterise AI opponents as thoughtful, twitchy or angry, for example. Well, humans too, I guess.

Party Golf certainly drew a crowd at PAX but it’s really the abundant and flexible gameplay options that will make you want to bring it home. Although early in development, the idea that you can choose precisely how you want to play underpins design. Lead Designer, Ian Lewis, adds, “We have a preset mode called “Davids and Goliath.” It’s one beachball versus a bunch of tiny ball bearings.” You could totally get a ball bearing to the hole first, with careful placement.







## BLOCKPOCALYPSE

**DEVELOPER** DIME STUDIOS  
**RELEASE** LATE 2016  
**PRICE** \$15-20  
[blockpocalypse.com](http://blockpocalypse.com)

I love apocalyptic content, from the bleakness of *The Walking Dead* to arthouse movies like *Melancholia*, where the question is posed, "How might someone who is severely depressed understand the ending of the world?" One thing I hadn't previously imagined, however, was how fun planetary annihilation might be. When your perfectly lovely city is suddenly and outrageously exploded by an inexplicable red ball, hilariously leap on stuff. Upwards.

I played *Blockpocalypse* at PAX with three other players. No-one is safe, not the Buddhist monk, the woman in the red dress or the left shark. I was the skeleton. I mean, the fact I was still fighting for "life" shows commitment, right? You'd think those guys would have waited for me. I mean, some of them had to. It's a strange mix of co-operative play and, "Get out of my way," that is required to throw televisions and pipes into an ascendant structure.

And, a surprising amount of play doesn't actually rely on survival at all. Yes, you must hide when it starts raining fire, and the main aim is to outrun rising lava, but you can also just chill out and shoot some hoops or capture and hold the crown. Make no mistake, this is a party game, and these would be standard multiplayer modes in any other. In *Blockpocalypse*, they are defiance, a middle finger to inevitable death.

Prototyped during a game jam titled, "What do we do next?" Creative Director, Dan Clayton, tells us, "We got really excited about the prospect of a co-op building game that would, at some point, pit players against each other." The best thing about *Blockpocalypse*, in its pre-release state, is that I am not sure if there is a happy ending for, specifically, my skeleton and, frankly, that's very disturbing. (Which makes for a suitable apocalyptic content, in my book.)

## ARMED WITH WINGS: REARMED

**DEVELOPER** SUN-STUDIOS  
**RELEASE** IN EARLY ACCESS  
**PRICE** \$8  
[www.armedwithwings.com](http://www.armedwithwings.com)

There's something quite evocative about a setting that's only black and white. As a result of early technology, the first sidescrolling spaceship I ever commanded was a tiny, bright triangle against the nothingness of space. Games don't have the same historical timeframe as film, however, and aesthetic conventions never became tied to technology in the same way. My first impression of *Armed with Wings: Rearmed* was that it would probably be bleak and *Limbo*-esque.

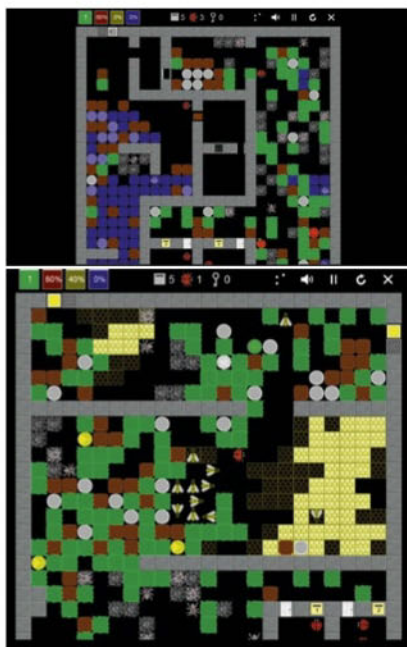
Interestingly, the combination of frosty mountains in the background and gorgeous animations creates a dramatic feel to combat without any negative connotation. My character is whirly and graceful, but so powerful. It is a joy to play because timing and skill is learned alongside a visual feast of movement, enhanced by the strong silhouettes. Combat begins simply but soon relies on reflexes, observation and use of surrounding terrain features.

What begins as, seemingly, an action platformer quickly becomes increasingly puzzle focused. Yes, you can engage enemies directly, but a smarter way might be to smash boulders and launch the resulting rocks with your katana, like an expert ice hockey player, from a safe distance. I absolutely love how the level design challenged me. Initially thinking, "Surely this is a bug. This is impossible," always gives way to, "Oh, I see. That's really clever."

Puzzling also uses a little bird who you can send a limited distance from you. I would tell you the kinds of things it can do, but that would spoil the way experimentation leads to understanding of the puzzle elements. Designer, Daniel Sun, tells us, "Armed with Wings: Rearmed is designed to make players feel like an epic samurai warrior, despite skill level." Certainly, if I was expecting sadness, I left feeling uplifted by the cleverness of the design and the beauty of the world.







## POST BUG

**DEVELOPER** HEMINGWAY GAMES  
**RELEASE** AVAILABLE NOW  
**PRICE** FREE  
[postbug.hemingwaygames.com](http://postbug.hemingwaygames.com)

■ Here's your love letter from an old friend. Sorry you drowned before you had a chance to read it. Initially, I decided to include Postbug in the PAX feature just because it is free and fully released. I figured readers could play along at home. Now, I suspect it might actually be the most compelling game in the whole collection. Why? In a world that will drown, crush or eat you at any moment, correspondence seems exceptionally precious.

And who makes sure your message gets through the perilous and dynamic rigors of nature in this Boulder Dash style open world of browser based mayhem? Me. The ladybug with the mail satchel. I will swim past jellyfish, command a bee army and dance around spiderwebs to do it. If I have push you into the claws of a crab so I can escape while it snaps you in half, well this is just the nature of things. Perhaps the next letter will actually be opened. By golly, I will deliver it.

Concurrently, here is a letter from designer, George Hemingway, to you, and it reads, "Postbug has been designed to encourage exploration, experimentation, and strategy building during gameplay. Players will need to experiment with their environment to understand how objects behave and I hope a sense of curiosity drives the player to explore the open layout." Watch out for that spider!

## QUARRIES OF SCRED 2

**DEVELOPER** KALE  
**RELEASE** AVAILABLE NOW  
**PRICE** \$4  
[darkestkale.itch.io/quarries-of-scred-2](http://darkestkale.itch.io/quarries-of-scred-2)

■ Prior to Postbug, at PAX last year, Quarries of Scred retrospectively introduced me to this specific and compelling blend of arcade exploration, collection and being crushed horribly from above. Recalling how well balanced the experience was, I was interested to see a new game for the series, recently released and now multiplayer. Developer, Kale, tells us that this is directly in response to 2014's feedback and people asking for it.

So, does the experience hold up with friends? With meaningfully different game modes, it's both usefully familiar and new enough to maintain interest. For starters, you can aim to be the last drone standing, or play in teams. Then, vary up how much loot is dropped, how many lives you have and terrain features, including how far you can see. Or, you can attempt the hilarious mycological melee, surviving while painting the level with either mushrooms or moss.

The four player slots can be filled with human players or challenging AIs. I quite like assigning four bots and just watching the game play itself, as well as the lighthearted humour, like being, "hugged to death." Kale tells us he spent time considering, "How do I use the same space and physics to do different things?" The result is more Quarries of Scred, reorganised in a bunch of ways and, as Kale says, "the energy that comes with friendly competition."



## GOAT PUNKS

**DEVELOPER** ALBERTO SANTIAGO  
**RELEASE** EARLY 2016  
**PRICE** TBA  
[goatpunks.com](http://goatpunks.com)

■ Are goats playful creatures? They always struck me as such, but maybe it's just because they bounce to get around. One way or another, the goats in Goat Punks have gone silly. This is a four player race to the top of one of many themed spires. What do you do when you get there? Try to stay there for a count of 30, exploding approaching goats with fireballs, when necessary. What happens if you are knocked off? The time you've won starts unwinding.

Along your way to the top of unlikely cities or a mountain of candy, there are a range of powerups to collect. Don't forget to push another goat off a precipice or activate your bubble shield if you need it. The action is fast paced and relies on both reflexes and skill. Designer, Alberto Santiago says, "When people play GoatPunks I hope to have them experience the same excitement I got when I was child playing games like Smash Bros and Bomberman."

I played this at home with my kids and it was a game they could both play instantly and improve at. At one point my five year old shouted, "I'm a goat," demonstrating that this game really does capture that goaty mood. On what inspired the game, Santiago says, "Random youtube videos about goats, Japanese game shows and Anime." Goat Punks is fun. Watch for it on Steam and head to YouTube in the meantime. Goats are amazing.



## TAHIRA: ECHOES OF THE ASTRAL EMPIRE

DEVELOPER WHALEHAMMER GAMES  
RELEASE 2016  
PRICE \$15  
www.tahiragame.com

I grew up devouring science fiction and probably my most beloved settings involved civilisations which had once been advanced and spacefaring, but were then plunged back into dark ages. You never quite knew the reason for the calamity, but incomprehensible technological artifacts were the perfect justification for magic. I could read Tahira: Echoes of the Astral Empire's title alone for several hours, I reckon. It's like flash fiction.

Creative Director, Peter Castle, explains some of his narrative influences, "I was trekking in the Himalayas, sketching a few ideas onto a notepad in the evenings. One of them was a picture of a princess standing at the top of a sand dune, she was looking down at a burning city that was being attacked by a huge army. It was her kingdom. The image stayed with me and I began to ask myself how that situation could have arisen."

In the demo, this question was merely posed, not answered. But, I gleefully battled Astral Soldiers, wondering at their incongruous name in this seemingly ancient place. Battled, yes, for the compelling narrative is only a mere backdrop to an incredible, turn-based strategy game. It is deep, without ever being confusing. Picture a Banner Saga where combat is explained perfectly, but without solving any aspect of the scenario for you.

For example, in one battle, I was overwhelmed. My options were to allow opponents to be distracted by killing civilians while I employed hefty flanking bonuses against outer groups. Or, I could try to reach civilians, tell them to flee and recruit the uninjured. Either way, positioning was paramount. Enemies get a free hit in their Zone of Denial. And, you must carefully manage statistics like Guard, which soak some damage and allow you to strike efficiently.

One thing is clear. Tahira, who is a military unit herself, must be protected. She is also formidable. What does her "magic" staff do? Currently, it zaps people in a column of blue light. It is both a useful area of effect weapon, on a grid which currently sees mostly basic melee and ranged attacks, by design, and a reason to wonder precisely what it is and why she has it. I strongly suspect this is a game I would play to the very end.



## OBJECTS IN SPACE

DEVELOPER FLAT EARTH GAMES  
RELEASE MID 2016  
PRICE TBA  
objectsgame.com

PAX  
SPECIAL

The only game I wasn't able to play at home, after PAX, was Objects in Space. It is both the quintessential, "game for a convention," and, ironically, something you need to sink hours into in a solitary space. Why? Well. For starters, to fire a missile, I literally had to flip back a safety switch and push my finger down on an ominous red button. If you were waiting for an invitation to build your own spaceship, this is it.

Lead designer, Leigh Harris says, "Objects uses a virtual serial port to interface directly with arduinos, LEDs, buttons, switches and dials. We'll release the source code for everything we build and do how-to guides online." Can you also play it with a mouse and keyboard? Sure. Will you still want to? Absolutely. Harris describes the game as, "Marrying the tense stealth action of submarine sims with the open-world exploration of space trading games."

During a 15 minute demonstration, I barely scratched the surface of the game's systems.

As well as powering down for stealth, hiding in nebulae and physically touching the many things required to blow up a pirate, I learned that engagement is limited only by your curiosity. Pay for repairs or figure out how to do it yourself. Further, if you lose the ability to control a system due to damage, look to the command line interface in the corner.

You can even get detailed, political leaning news from the different sectors you pass by and it is this depth, beyond hardware customisation, that promises flexible, meaningful play. PAX-goers may have been drawn to Objects in Space because of its peripherals, but were then treated to a deep simulation experience. In a convention full of fun, but often fleeting moments, Objects sparked enduring eagerness in everyone who played it.



# 10 to Watch



## SHELTERED

DEVELOPER UNICUBE  
PUBLISHER TEAM 17 SOFTWARE  
DUE APRIL 2016  
[www.unicube.net](http://www.unicube.net)

■ A post-apocalyptic strategy game that shuts you in a small underground fortress with a family to control. As dust storms rage and the days whittle away, you must maintain your new home, gather supplies, and above all else, survive. Interact with other survivors, band together, or fight to the death, the game lets you decide what's best for your family, but your actions could have grave consequences as you're stranded in this nuclear wasteland.



## BESIEGE

DEVELOPER SPIDERLING STUDIOS  
PUBLISHER SPIDERLING STUDIOS  
DUE 2016  
[www.besiege.spiderlinggames.co.uk](http://www.besiege.spiderlinggames.co.uk)

■ Build, destroy, build again. There is no story, rhyme nor reason for you to hurtle a small wooden car with various explosives tucked through the structures of your enemies, but that doesn't mean you shouldn't. A physics based puzzle game, you must destroy as much as you can in an area with one machine of your making, using the limited tools each level provides, anything goes in a very "ends justify the means" type setting.

## ROBOCRAFT

DEVELOPER FREEJAM GAMES  
PUBLISHER FREEJAM GAMES  
DUE 2016  
[robocraftgame.com](http://robocraftgame.com)

■ Build the robot you'll control to destroy your enemies in this freemium online tank shooter. Each component used changes the properties of your tank based on five categories, but everything leads to the goal of total domination on the battlefield. If you can build it from the set list of materials before the round starts, you can pilot it through the forces of opposition. With a basic art style and simple premise, there's nothing to distract you from pure mechanical carnage.

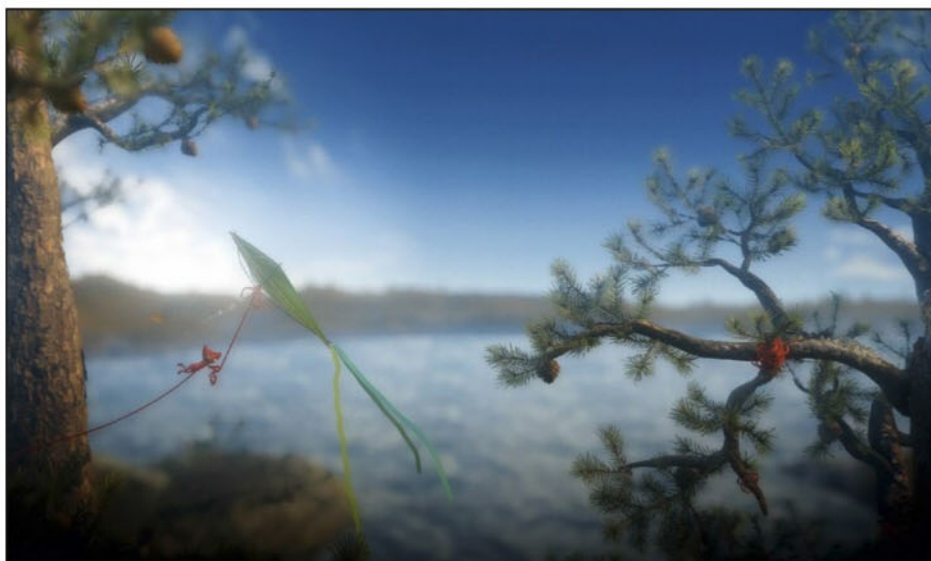




## WARHAMMER 40K: ETERNAL CRUSADE

**DEVELOPER** BEHAVIOUR INTERACTIVE  
**PUBLISHER** SQUARE ENIX/EIDOS  
**DUE** 2016  
[www.eternalcrusade.com](http://www.eternalcrusade.com)

■ If this list is anything to go by, 2016 is the year of simple, and sometimes that means all you want to do is run, shoot and sometimes stab a little. Well get ready to jump into some power armour because that's all you'll need for Eternal Crusade. Enter the first RPG world of Warhammer 40k and purge the galaxy of your enemies. Choose a race and conquer the universe with blood, sweat and bullets.



## UNRAVEL

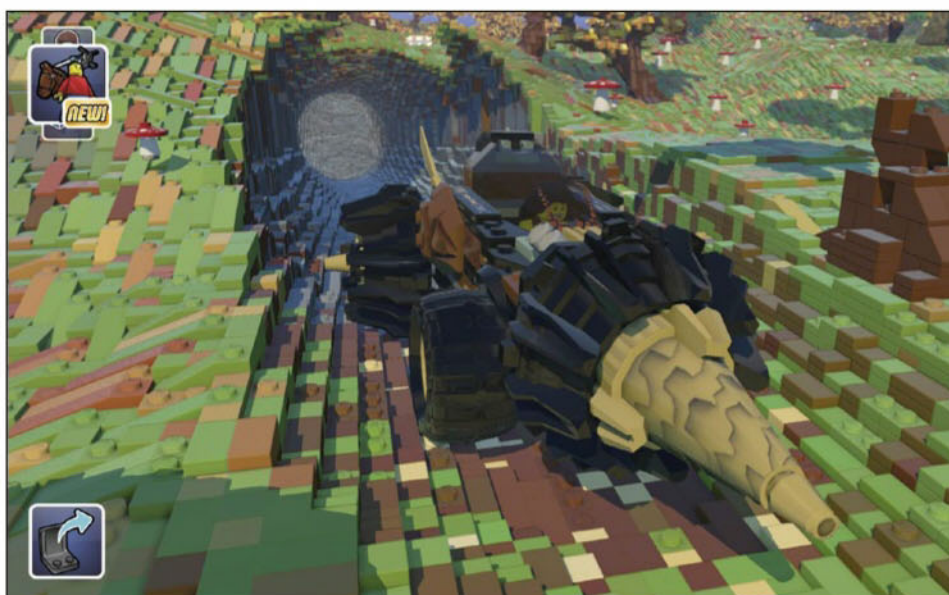
**DEVELOPER** COLDWOOD INTERACTIVE AB  
**PUBLISHER** ELECTRONIC ARTS INC  
**DUE** 2016  
[www.unravelgame.com](http://www.unravelgame.com)

■ You'll be hard pressed to find a cuter game coming for 2016. What's gonna beat a little red yarn creature that fends off hamsters and swings around with loose threads? In a similar thread to Limbo, follow Yarny's side scrolling puzzle adventure as he works his way through stunning scenery based on the lush environments of Scandinavia. As you go along, maybe you'll learn the heart felt story of Yarny and his long lost family.

## LEGO WORLDS

**DEVELOPER** TRAVELERS TALES  
**PUBLISHER** WARNER BROS INTERACTIVE ENT.  
**DUE** MARCH 2016  
[videogames.lego.com/en/lego-worlds](http://videogames.lego.com/en/lego-worlds)

■ We've been building Lego worlds since we were kids, but the Lego video games have been reticent to delve into that sandbox experience, even with the rise in popularity for the genre. After countless Star Wars, Indiana Jones and miscellaneous Marvel titles, we now have the chance to build your Lego world, and it's on your computer, so there's no need to clean up afterwards.





## NARUTO SHIPPUDEN: ULTIMATE NINJA STORM 4

DEVELOPER CYBERCONNECT2  
PUBLISHER BANDAI NAMCO  
DUE FEBRUARY 2016  
[www.naruto-videogames.com](http://www.naruto-videogames.com)

■ Beat up ninjas and look good doing it in the newest cell shaded fighting game for the Naruto series. Cyberconnect is looking to put this game on a whole new scale, with a bigger cast, larger move set and even more preposterous animations. Cut an enemy in half as well as the mountain behind them if you really want to, 'cause that's the aim of the game. Don't just win, win in style.



\*IMAGE FROM HEARTS OF STONE EXPANSION

## THE WITCHER 3: BLOOD AND WINE

DEVELOPER CD PROJEKT RED  
PUBLISHER BANDAI NAMCO  
DUE MARCH 2016  
[www.thewitcher.com](http://www.thewitcher.com)

■ Geralt of Rivia is done with the warring regions, so he's decided to vacation in a less hostile area. Of course CD Projekt RED knows that players won't be happy until Geralt has something to swing his sword at or smooth talk his way out of. The new region of Toussaint is home to some very dark secrets for our brooding hero to uncover and overcome.

## HITMAN

DEVELOPER IO-INTERACTIVE  
PUBLISHER SQUARE ENIX/EIDOS  
DUE MARCH 2016  
[hitman.com](http://hitman.com)

■ Shoot, stab, strangle, or ignore; the life of an assassin is full of choices. Agent 47 is back and ready to take out all new targets in a brand new story, completely separate from the previous five major titles. In what is set to be a partial release, the game is being promised to expand over its lifetime, with new limited contracts being opened periodically for players to enjoy, completely free.







## FAR CRY PRIMAL

DEVELOPER UBISOFT STUDIOS  
PUBLISHER UBISOFT

DUE MARCH 2016

[far-cry.ubisoft.com/primal/en-AU/home](http://far-cry.ubisoft.com/primal/en-AU/home)

■ We liberated and Archipelago, then we quelled a civil war, after a few more years it was back to a different archipelago, and the... another, civil war. Well now Far Cry is changing it up. Who needs guns and warring factions when you can have feral beasts and cannibal factions. Granted, angry animals have been a staple for the entire series, but Far Cry Primal has really thrust them into the limelight.





# SECOND SIN

One of the best RPGs in recent years gets an even more ambitious sequel.

Divinity: Original Sin 2

DEVELOPER LARIAN STUDIOS  
PUBLISHER LARIAN STUDIOS  
DUE A VERY TENTATIVE DECEMBER 2016  
[www.divinityoriginalsin.com](http://www.divinityoriginalsin.com)



**Q&A** Handelsdokcenter in the historic city of Ghent in Belgium is not typically the sort of place one associates with video game development. Yet it is here in an old historic warehouse converted to office space that we meet up with Larian CEO **Swen Vincke**.

**Hi Swen thanks for this meeting.**

**Swen Vincke** - My pleasure.

**Because of the prohibitive labor costs and costs of doing business in Belgium the development community here is smaller than surrounding countries so 20 years ago when you decided to start a company and work on big RPG games, what the hell were you thinking?**

Actually we started small but then Atari in 96 wanted to get in to PC games and they gave me startup funding. With that we hired a couple of guys and suddenly Atari decided to exit PC games and that is where German company Attic entertainment came in. They gave us a lot of money to fund the LMK (The Lady, Mage and Knight). Attic wanted LMK to be the fourth entry in their Realms of Arkania series but we wanted to create our own world and lore. And then Diablo happened. There was a switch from 8-bit to 16-bit color and they wanted us to redo the entire game to fit in their lore, redo the graphics and gameplay and lots more, small problem: they did not have the money to fund these changes so that became a problem for us. We started doing work for hire projects just to survive and work on our own game that would become Divine Divinity. We left Attic, because well they were not paying us, and signed on with another German company CDV. They invested heavily in us. This was 98/99 and RPG games were doing great business on PC back then.

**So what eventually became of LMK?**

The last compiled version we gave away on some GOG.com bundles. We had more advanced versions that ran on the old Voodoo 3D cards but those obviously do not run on current systems and even the other versions are like archeology to get running. We do have a few design documents we made back then on the walls here and the original hand drawn map of its world.

**Divine Divinity came out but I understand you always hated that name.**

Yeah that was a nasty surprise CDV pulled on us. It was called Divinity: Sword of Lies but CDV just had a big hit with a game called Sudden Strike which is an alliteration and they figured alliterations sell so they had us change it to Divine Divinity.

**Attic went bankrupt, CDV followed a few years.**

And after that DTP Entertainment. Yeah all my German publishers went bankrupt, maybe it is because of me (laughs)

**And all 3 times they almost dragged Larian down with them.**

Yeah thankfully most of the time we could fall back on contract work to make it through those tough times. Attic Entertainment definitely, they had stopped payments altogether. CDV was doing OK and was making a lot of money with Divine Divinity. Their problems started afterward and they never paid our royalties, and DTP was problematic from the start.

**Any idea how much money you lost because of all that?**

I do not waste my time thinking about that. What concerns me most is what you see behind you. The games we work on, 90% of my time is spend on that. The business side is only small 10%.

**By Mid 2k you had Divinity 2 and a surprising amount of contract work.**

Yeah after Divine Divinity, Larian had to downsize from 30 people to 3 to stave off bankruptcy because CDV did not pay us, which was shitty. We made Beyond Divinity on our own that brought some money for us and at the same time we made Ketnet Kick (a transmedia game where kids interacted with a



**After Divine Divinity, Larian had to downsize from 30 people to 3 to stave off bankruptcy because CDV did not pay us**

PC to a kids show on TV) for local broadcaster VRT in 2004. That one was really successful and was even sold to the BBC and received a sequel in 2008. Those projects consumed a lot of time from the studio but it allowed us to start working on an RTS with the working title End of Nations. A publisher came to us and said we will not give you money for a game called End of Nations but call it Divinity 2 and we have the funds you need. So we changed the name to Divinity 2 and never got money from the American publisher who came to us because they too went bankrupt. Eventually we proposed revenue share models to publishers because we had funded half of the games ourselves already, which was good on paper, until, of course, it was time to collect the revenue.





### And then there were a few expansions.

Yeah and that was a real pity because DTP forced us to release those too early. If you look at Dragon Knight Saga, which you could say was Ego Draconis Enhanced Edition the Metacritic for the game is 10 points higher. It is something that happened with all our games, forced to sell them before they are finished. It did not happen with Original Sin and look at the difference.

### For Dragon Commander and Original Sin you guys developed your own engine, is it not cheaper to use a third party engine?

We used to use Gamebryo before that. It was also used in Oblivion for instance and they were very expensive, they also went bankrupt. We started to become financially and technologically independent so we dropped Gamebryo.

### Yes but third party engines have become very cheap now.

Yeah but do you remember Renderware from Criterion? Before Unreal Engine and Unity it was the most licensed third party engine. Then EA comes along and buys them. You do not want your source code in the hands of a competitor so everybody dropped them. I do not want to be reliant on other people's technologies, you never know what could happen.

### You mentioned RTS earlier but Divinity has gone through other RPG play styles as well. Why is that?

We like all sorts of play styles, and originally because we wanted multiplayer co-op play in there. We first envisioned Original Sin as an action RPG, which is much easier to do co-op play in until we found a way to do turn based without blocking the other player. Then switched to that because nobody else has done that before.

### After Original Sin, Larian has grown a lot. Ghent, Saint Petersburg Russia, Quebec Canada and the writers team in Dublin Ireland. Does this change how the company operates?

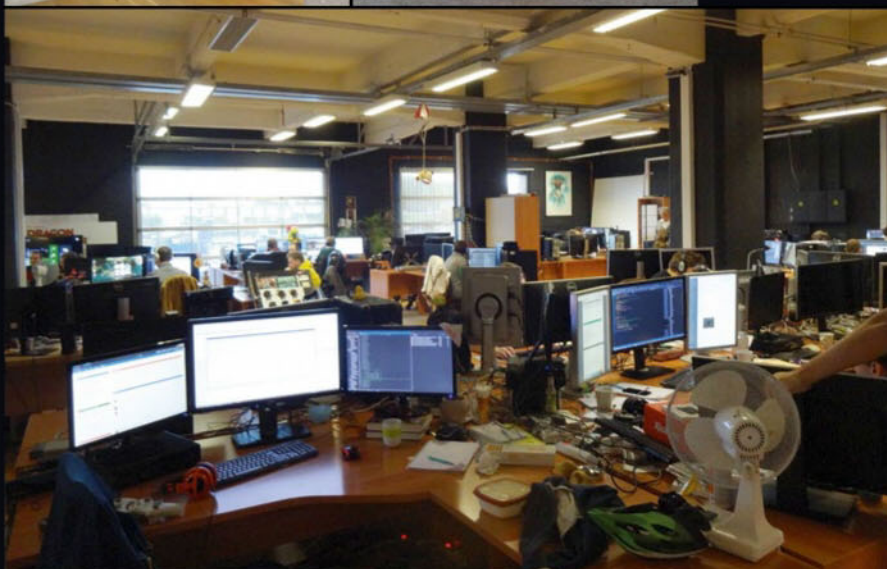
I travel a lot more. Lots of air miles (laughs). But no. We always had people who worked from home or we outsourced certain aspects to outside companies. It goes back to having control over our projects, now we can do those things in house.

### The Kickstarter for Original Sin ended at just under 1 Million US\$, for Original Sin two you got more than 2 Million US\$. Larian obviously has a dedicated fan base.



### THE LADY, THE MAGE AND THE KNIGHT

Above a door at Larian Studios in Ghent hangs a huge hand drawn painting of the map they drew to pitch the game to Trip Hawkins, founder of EA and 3DO after Atari decided to abandon the project. Sadly Trip did not come through.





Well yes but you have to work real hard for that. Do not start a Kickstarter unless you are willing to engage with your audience and listen to them. Be prepared to work long and hard supporting it as well. We were lucky we already had a fan base when we did the Kickstarter for Original Sin, and for Original Sin 2 we expanded on that. And you know you have inexperienced people who make wild promises and they are looking for 50k or something silly like that. It's like an architect that promises to build a sports stadium for the price of a house. Look at all the concept art on the walls here. I can point you to that monster and say how much it will cost in animation time programing time, skillsets etcetera for just that one monster we are looking at half a years' worth of work. It is a lot of work.

**It is not done to announce a sequel before the original game is out but obviously it worked out for you.**

Well yes I was looking at the timeline in which we want to release Original Sin 2 and we wanted to do the Kickstarter well in advance of that so we announced it before the release of the Enhanced edition and before the game ever appeared on console. I think the fact we communicated clearly ensured that people were talking about Original Sin 2 and the Enhanced Edition more than if we had not done that.

**Early Access is going to be very important for Original Sin 2 I presume.**

Oh yeah definitely, we see our community as part of the team. Their feedback allows us to make the games better even when the feedback is negative. It allows us to fine tune the games and gives us insights we might otherwise not have or would have overlooked.

**Back to budget, Original Sin was made on a budget of roughly €4 Million (just over \$6 Million AUD) other big RPG games are made for 10 to 20 times that amount.**

Well yes but that was for the first release. It is a lot more now because we kept working on it for another year. With the improvements made to it, and now it's fully voiced as well. But



■ It's like an architect that promises to build a sports stadium for the price of a house ■

yeah as a small studio with small budgets you often have to be creative in your solutions. We cannot throw money at them like the big boys, so we have to be more creative than them, and often that creativity is not seen unless by other developers. I will give a specific example. In Original Sin the camera never zooms in close to the face because it is low poly, while in a game like Dragon Age they constantly do that and show of all the facial animation. But doing that and animating that costs huge amounts of money, money we do not have, so we do not zoom in. We employ other tricks like that but I am not going into that any further.

**I assume Original Sin 2 will cost more to develop and you will not tell us how much more.**

Hahaha yeah it will be a lot higher but I do not know just how much yet

because I do not know myself yet how high it will end up. I know what my burn rate is, I know what my end date is and we will probably miss that anyway and we have an added buffer on top of that and I know what we want to achieve with this game and let me tell you we are bloody ambitious. So far the things we tried have all worked which is bloody annoying because it prevents you from having to make choices. We have a bigger team and attracted a lot of talent to work on it.

**So the teams in Canada and Russia are going to continue to grow?**

That is going to depend on the games actually, we hire depending on the needs of the game.

**Games or game there is a difference. You said previously that your ambition is to create one great RPG each year.**

Yes that is correct but consider this we were working on Enhanced Edition and Original Sin 2 simultaneously. That is two games and having to optimize the engine for consoles benefited

Original Sin 2. So the synergy is there and we keep learning and improving because of that. We take what we learn to our future projects. So let me show you the game. **HASAN ALI ALMACI PC**



#### CHARACTER CLASSES

Five races exist in Original Sin 2, humans, Elves, Dwarves, Lizards and thanks to a Kickstarter stretch goal, the undead. Thanks to the origin stories, huge differences exist within these racial groups. A human, for instance, can be of noble blood or indeed be low born and looked down upon.



The demo began a few hours into the game, with four Sourcerers (A Nobleman, Rogue, Dwarf and Elf) had just escaped prison where they were placed by a Bishop, waiting to be stripped from their Source powers. Playing with pre made characters we were unable to see the character creation screen where you can choose attributes like your race, stats and origin story. All of which we have been told will affect the mission you get, the story you are told and even how you are treated by non-player characters as well as other players.

The first thing we notice is the graphical boost the game has received over Original Sin. It is obvious that the in-house engine Larian started building with Dragon Commander has been continuously updated. From the first moment you move the added animation and background detail becomes obvious. One thing that failed to manifest, however, was voice acting. When queried about it, the devs confirmed that the game will definitely have voiced dialog but they are not sure how much at this point, for the simple reason that the story is going from 800k words in Original Sin Enhanced Edition (which is fully voiced), to several million.

Because of the placeholder interface, our first encounter with enemies felt much like the first Original Sin, but it did not take long for all the improvements to come to the fore. Playing co-op with four rather than two people changes the dynamic of the battles, even when the party size remains the same as Original Sin – four characters. In fact, your co-op partners might even decide to let you fend for yourself by deciding not to get involved in your fight. Making decisions like that affects the story further, as well



Combine poison with a spider spell and you can summon a poisonous spider, combine rain with a fire spell and manifest driving, fiery rain

as attribute points and how well characters get along with each other. Social class and race further deepen these interactions.

The battle system has been upgraded to offer even more depth, with the player now being able to not only craft weapons but also new spells by combining different spell books. Combine poison with a spider spell and you can summon a poisonous spider, combine rain with a fire spell and manifest driving, fiery rain that burns your enemies.

Even stronger spells exist in the form of the new Source spells. Source, however, is rare, unless you possess the Source Vampire skill with which you can harvest the Source in the souls of the recently deceased, or those you just killed on the Battlefield. Harvesting souls, naturally, is seen as evil. Do it

#### BISHOP ALEXANDER THE INNOCENT

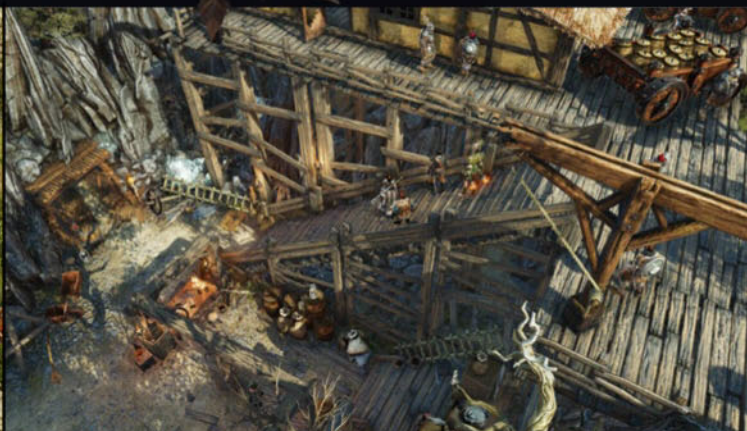
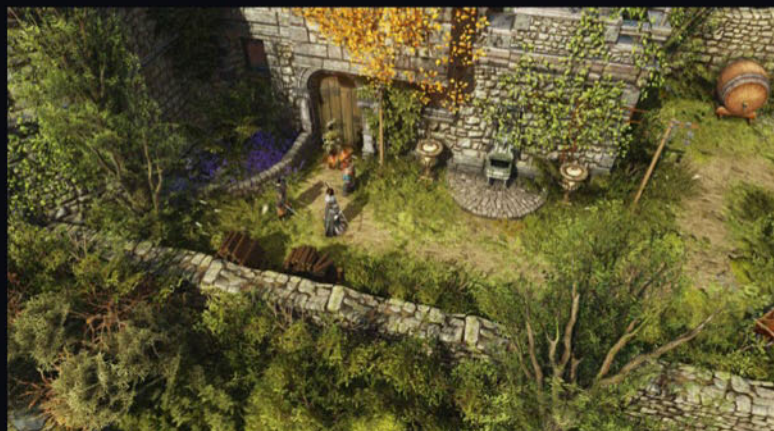
The Sourcerers are on the run from Bishop Alexander, a religious zealot who declared that only his Church of Divine Order should be allowed to use Source Magic. To achieve this they imprison Sourcerers and painfully purge them from their powers.

often and you will lean to the dark side of the Source, which might complicate quests that necessitate a person of certain virtue. In addition to talking with animals you can now talk with the recently departed, and that includes those you have just killed in battle.

Entering towns in the game you see politics at play. Humans and dwarves,

for instance, generally do not get along, and members of your party might be denied entry depending on your class and social status.

This sort of depth extends to all parts of the game, even in the interactions between co-op players. In







Original Sin there were two possible outcomes when players disagree, with four players this does not double but triple the options. When you do not get your way with words you can always turn on your team mates and replace their health potions with poison, or even stab them in the back during battle, kill them and then harvest their Source energy.

After spending a very pleasant day with Swen and the game, we can safely say that even now at least a full year before release Divinity: Original Sin 2 shows an insane amount of promise. Everything in the game looks to be expanded over its already excellent prequel. Waiting to sin once more will be hard. **HASAN ALI ALMACI PC**



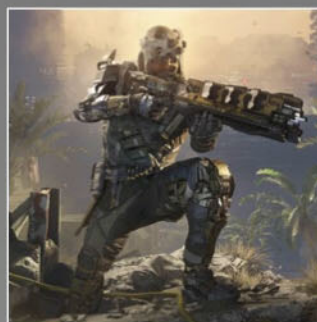
#### INTERACTION BETWEEN CHARACTERS

All characters have their own reasons for accepting or denying a quest. A dwarf might accept an assassination mission because the human target humiliated him, while a Lizard might do the same mission because the target killed one of his tribe. Meanwhile an Elf might join to gather intel while a human might decide to stay at the inn sweet talking the barmaid.



# Games

## YOUR GUIDE TO PC GAMES



**T**here are a LOT of explosions on review this month. There are vertibirds and Fatboys blowing up in the Wasteland; cybernetic tanks blowing up on CoDBlops III, and doors being blow off their hinges in Rainbow Six: Siege. Star Wars Battlefront has some of the prettiest explosions we've ever seen, while Just Cause III is pretty much nothing BUT explosions.

Those last two are really interesting cases, too. They - and to a degree Blops - are really amazingly looking games, which some no doubt very clever devs worked on and sweated over, but somehow... they've forgotten to include much of actual game.

They'er very much a case of, as Willy Shakespeare put it, and I will paraphrase, 'sound and fury signifying pretty much bugger all'.

Okay - he probably said it better.

But the point stands. Battlefront in particular seems like a gregarious waste of not only great visuals (Hoth may be one of the prettiest levels in any game), but amazing sound design. The multiplayer can be fun, but it's awfully simplistic, and often very frustrating, and there's simply not a lot of content for the price.

Imagine how those assets could have been used in, say, a Dark Forces-style singleplayer game, something with meat and story and real depth and emotion, rather than constant explosions and A-Wings ramming Darth Vader to death.

Now that would have been something.

**David Hollingworth**  
Digital Editor

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**SCORING SYSTEM** | PCPP scores its games on a 1 to 10 scale. The higher, the better - though 10 is by no means a "perfect" game. We're not convinced such a thing exists, so consider a 10 a masterpiece of PC gaming, despite its inevitable flaws. A 5 is a decidedly average game; one that doesn't excel in any particular area, without being an affront to our senses - the ultimate in mediocrity. Below this, you'll start to find the games our reviewers suffered an aneurysm getting through; above it, the titles truly worth your time and money. And remember: a score is only a vague indication of quality. Always read the full review for the definitive opinion!

WE  
PLAY  
ON:



**ALIENWARE**  
GAME VICTORIOUS



**ORIGIN**





# Fallout 4

DANIEL WILKS and DAVID HOLLINGWORTH are just trying to get by

DEVELOPER BETHESDA GAME STUDIOS  
PUBLISHER BETHESDA SOFTWORKS  
PRICE \$79.95  
AVAILABLE AT STEAM, RETAIL  
[www.fallout4.com](http://www.fallout4.com)

**WILKS:** I'm officially obsessed with Fallout 4. After putting 25 or so hours into one character, due to a lack of Steam Cloud sync between my home and office PC I started a new character at work that I have now put 67 hours into. And after all that time I feel like I have barely scratched the surface of what the game has to offer. I've unlocked a heap of locations and done my best to either explore them all or take notes on which places have proven too deadly or inaccessible due to lockpicking/hacking skill levels, but the majority of the game map is still a whole heap of nothing. I've barely started on the story quests or any of the main questlines. I can tell I'm going to be playing this game for some time to come.

For a game this big, David Hollingworth and myself chose to take different approaches, so between us we could better explore the wastelands and see exactly what there is on offer. I chose to take a perception, intelligence, agility route - stealth, crafting and melee. And my character is a woman.

**HOLLINGWORTH:** Whereas I started out being a tough-guy gunman, focusing on Endurance and Agility. But there's so much in the game that I'm finding that plan hard to stick to.

But you are so right - to say that Fallout 4 is packed with content is an understatement. From companions and their quests, to settlement building, pure exploration, side and main-quests... gosh, unless I can play for at least two hours I'm not even logging on. This is a game I want to really lose myself in.

I've played a little less than Wilks, but I've taken a different approach to quests. I'm the kind of guy (I get this from tabletop roleplaying) that always follows the most important questline - in this case, the main quest, which revolves around your family - that seems far more important than helping out the Brotherhood of Steel for instance. And the main quest-line has some wonderful missions, and the open nature of the map never stops you from moving on. Even better, the game doesn't level opponents to match

you - rather, you'll often come up against creatures that are a higher level. And these aren't meant to be blockers, like the infamous Deathclaws of New Vegas - they're just harder fights that, if you're dedicated, you can get through.

But as I said, sticking to my plan for levelling has been hard - a lot of game, especially crafting and settlement-building, requires certain perks. And I've gotten really addicted to both. What do you think of those systems?

**WILKS:** One of those obsessions of mine is perfecting my gear. That's something heavily perk based if you want to build from scratch but on my second character it has come down to luck (not the SPECIAL attribute luck, but the regular RNG kind). I've managed to put together an advanced romm with a silencer, sharpshooter's grip and basically all the best in slot mods just through finding the right parts on other guns. On my other character I've put together a best in mod slot sniper rifle through putting heaps of points into the crafting





skills for guns - Gun Nut and Science! Both approaches have been equally satisfying.

As far as the base building goes, it's great but I find the mechanics a bit frustrating unless you have enough points in Charisma to get the perk that allows trade routes between your settlements. Each thing you build in a town requires components, and while the basic wood and steel parts can most likely be scavenged by dismantling junked cars, demolished houses and the like, the rest need to be salvaged from things you find in the world. You can store this salvage in a Workbench, but unless you have the right perk that salvage can only be accessed in the same location as that workbench. Mechanically it makes sense, but not being able to finish building a house because you have to run to another settlement to grab enough resources to complete the build is rather frustrating. That said, the modular nature of building is great and allows for a great deal of creativity.

**HOLLINGWORTH:** Yeah, needing to spread around those perks to get the most out of the newest features - crafting and building - seems to be a bit of make-work. That said, those processes are hella worth it.

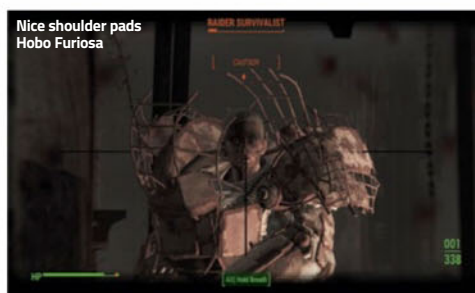
Fun as they are, though, it's the world itself which really shines.

Where previous games have been rather, well, bland - as befits a wasteland - The Commonwealth in Fallout 4 is much more colourful. It's still largely dead and irradiated, but it's much more built up, with lots of bright colours underneath the rust and grime.

It's also a far more varied environment, full of broad rivers, blasted forests, and even a number of heavily built-up urban areas that bring a lot more verticality into the gameplay. One region, the Glowing Sea, is possibly the most eerie in any of the games, a ground-zero blast-site full of the nastiest mutant creatures and a rad-count so high you need to be constantly injected Rad-X and RadAway, or in power armour, which is pretty proof against rads.

But then again, power armour is a whole sub-system in of itself this time around.

**WILKS:** I was pretty damn surprised when I was basically given a full suit



Every time I find a suit of power armour I take it and store it at my base. There's no need to do that

#### WHY SHOULD I CARE?

- + You love a catchy, kinda racist radio tune
- + You have a bunker in the backyard
- + You love the taste of grilled roach
- + You ain't afraid of no Deathclaw

of power armour and a minigun in one of the very first missions of the game. It feels really overpowered at first, but that's the whole idea. You get to feel what it's like running around in the armour, but the fuel cells don't last forever, so early in the game you have to use it sparingly so as not to find yourself out of juice and having to slowly trudge around to get it back to base.

Each component on the armour is craftable, allowing you to constantly upgrade or tweak the performance of the armour to suit your needs. You can boost some stats with a paint job, make the armour more resistant to certain types of damage, add special abilities, like a jetpack or advanced targeting computer that helps you in V.A.T.S. Every time I find a suit of power armour I take it and store it at my base. There's no need to do that. I'm just a hoarder by nature. I've spent quite a few resources upgrading one of my suits, but that has just been a fun exercise. As I'm taking a stealth

route I'm mostly sneaking about in my Vault Suit anyway. Or a slinky dress, Pompadour wig and pair of fashionable glasses when I'm talking to merchants and NPCs. Those extra five charisma points they get me really boosts my cap stash.

Getting back to your earlier point about the world, I think that this is probably the best realised, most flavourful world that Bethesda has created. There are these little stories throughout the world, some of them in the form of holotapes, others just in the way that things are arranged or the position of corpses that really gives the place a sense of history and being lived in. An exclusive club full of skeletons, each of them with a glass next to them, poisoning themselves with one final toast after the bombs dropped. A bank robber caught in the blast, mid getaway. Little things like this are dotted throughout the world. It's a wonderful touch, making simply exploring Boston as satisfying as following the main threads of the story.





**HOLLINGWORTH:** I love some of the little vignettes you find, like skeletons in lawn chairs all along a certain stretch of waterfront, or the drug intervention you stumble on that's turned into a gunfight. Combined with patrols by the Brotherhood of Steel, random gun battle between various factions, and the impressive weather and day/night cycles, Fallout 4 is much more alive.

But the main story is very strong, too, and a lot darker. I feel a little spoilery for bringing it, up but since it's pretty much how the game opens, the transition from happy 1950s styled retro future of 2077 to nuclear wasteland is really striking, and when you watch your family torn from you - I won't say anything more - there's a real drive to just go save them by any means necessary.

As I said, when a plot is that narratively driven, I tend to follow it, but Fallout 4 is very clever about organically blocking that - you need certain bits of equipment, or other bits modified and repaired, so you're forced to stop in your relentless quest, and explore the world, and while you're doing that you may as well do

sidequests along the way. And there's a lot more Skyrim-style 'dungeons' about the world, too, so even clearing those can be satisfying - they may be a raider camp with a half dozen psychos, or entire factories full of killers.

But the main quest has some wonderful missions - one has you using Dogmeat to follow scraps of evidence to hunt down someone who, well, has done bad things to your family. It's essentially an escort quest, but it doesn't feel like one, and is entertaining to boot.

What have some of your quest highlights been?

**WILKS:** There have been so many. Seeing the Predwyn fly overhead for the first time, seeing an Alpha Deathclaw and Legendary Glowing Radscorpion duke it out in the Glowing Sea and quickly finishing off the winner, becoming besties with Nick Valentine, discovering that due to the way I've put my character together that I can kill a Legendary Annihilator Sentry Bot (Mark II no less) in a single stealthy melee attack. Every time I play I stumble across something that sticks

in my mind and I want to share with someone else as an anecdote.

I've been trying to power through the story so I could finish it before we sat down to write the review, but I keep getting distracted by cool stuff. It's rare that I don't become distracted on my way to an objective by an interesting looking building, ruin or installation. The world tells as much or perhaps more story as the actual plot, and constantly intrudes (in the best possible way) on what you're planning to do. I also find myself constantly trying to follow questlines my companions like so as to maximise my relationships with them, not out of some desire to min-max the special perks you get from being besties with the companions but rather because I like, for the most part, hanging around with a bunch of them. Nick Valentine the robot detective, Cait, the drug addicted Irish brawler, Piper, the intrepid reporter and Codsworth, the dutiful Mr Handy robot servant are all really well-crafted and fun characters with interesting quirks and plots of their own.

As much as I like travelling with

## BOSTON LEGAL

**1.** HP is determined by level, endurance and perks

**2.** Radiation damage is shown in red and the amount of damage acts as a hard cap for your current health

**3.** The hud shows the relative position of nearby locations. It's not the clearest

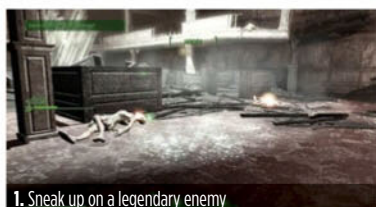
**4.** Although not all buildings can be entered, it's a good bet that any highrise you see can be explored

**5.** Water causes serious radiation poisoning unless you have the Aqua-Man/Aqua-Girl perk

**6.** If you can see it you can reach it

## SEQUENCE

### LEGENDARY LOOT



1. Sneak up on a legendary enemy



2. Backstab for an instant kill so they can't mutate

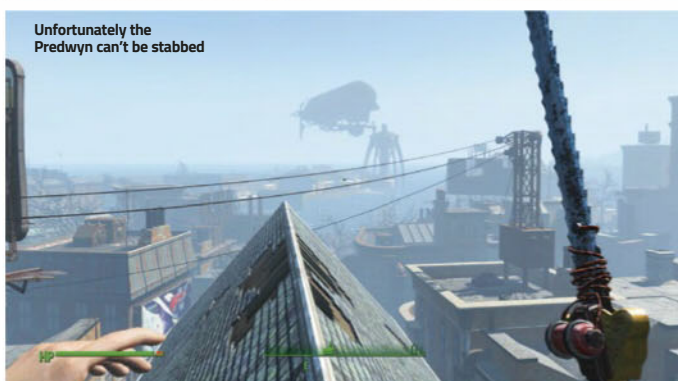


3. Get a rubbish Legendary





Unfortunately the Predwyn can't be stabbed



## HE SAID

Talion is a tough guy - I've maxed out his Endurance, which means he can take a lickin' and keep on tickin'. This also opens up some really nice Perks, but so far I'm spending those for pistols and semi-auto rifles, and in building up my crafting and base-building potential.

He's not a sneaky guy per se, but he always starts a fight crouched, because those sneak attack bonuses are so worth it. With weapons that do extra critical damage, like the excellent Ultimate Authority, you can deal a hell of a lot of damage.



## SHE SAID

Adalyn is all about stealth and sneaky kills. The only weapon specific perk she has is Big League, increasing her melee damage. The 80% extra melee damage from that perk combined with three pips in Ninja (giving 10x stealth melee damage) mean that my stealth melee attacks do an unbelievable amount of damage - about 840 to normal targets and around 1260 to robots thanks to my sweet legendary, totally upgraded Chinese sword that does 50% extra damage to robots and a smidge of electrical damage on top of that. Even without any gun skills, again, thanks to having high stealth, some Legendary Chameleon armour pieces and three pips in Ninja, each stealth attack does 3.5x normal damage. She likes to be prepared, so carries three different sniper rifles suitable for every occasion - a laser sniper rifle that does double damage to creatures on full life, a Legendary plasma sniper rifle that does extra limb damage, and a silenced .50 cal rifle for taking down targets silently. She also carries some fancy duds to boost her charisma when chatting with NPCs or bartering for goods. Nobody can resist a woman in a tastefully sequined dress, a sweet hat and funky sunnies.

Outside of stealth, the perk focus has been crafting - Blacksmithing, Armoursmithing and Science! - Lockpicking and Hacking, and a few useful little sidetracks, like Aqua Girl, a perk that allows Adalyn to swim without taking radiation damage and breathe underwater.



them for the company, the companion AI is a major pain in the arse though. They get stuck in doors, can't path to objects, agro monsters you're trying to sneak by, walk in front of your gun in the middle of a VATS killing spree and sometimes repeat the same few lines of incidental dialogue ad-infinitum in certain places. Did you suffer the same problems or was I just unlucky?

**HOLLINGWORTH:** I've tended to stick with Valentine for the most part, as his skills compliment my own. The ability to get him to hack into high-level computers, so I don't have to spend the all-important Perks, is invaluable. But by and large I've had few issues with him as a companion, and having given him some upgraded weapons, he's a genuine power-house in a fight, switching between a high-powered pistol and a nasty Chinese broadsword for when things get up close and personal.

Of course, yeah, his pathfinding is a little bit dodgy, but given he is an old AI, his actual pathfinding is probably pretty accurate!

One interesting thing about companions in *Fallout 4* is that they cannot be killed. Rather, they get incapacitated, and need to be revived with a Stimpak - even Valentine! On the one hand, it's cool that you're not going to lose a companion you've become invested in, but on the other had I always rather liked the fact my companions never seemed to last all that long.

But I completely agree about the richness of the world. Previous *Fallout*'s have been largely empty spaces filled with memorable events, places, and characters. *Fallout 4* manages to keep the feeling of a blasted, post-apocalyptic hell-cape, but to also make it feel more alive. And as much as the story moves you forward, you're constantly discovering the history of the Commonwealth. Between the little vignettes of the days before the bomb, to the various holotapes and computer journals, there's enough here to satisfy even the most dedicated lore-hunter.

One thing I do want to talk about though are the Perks and character progression system. I have to admit, I'm finding it a little more restrictive than previous. There's the fact that you can't access certain game systems without Perks, which is a little annoying, but I'm not feeling as though I'm advancing nearly as effectively as previous titles. I'm in my 20s,



## ■ ■ *Fallout 4* could well be the best RPG that Bethesda have developed in quite a while ■ ■

and I just don't feel that much more effective than when I started - apart from getting and crafting better weapons.

How are you finding it?

**WILKS:** I know what you mean about Valentine being something of a badass. I handed him a Stunning Super Sledge (an electrified rocket powered sledgehammer) to carry and since then he just charges into combat and swings away. He also has the strange habit of picking up every gun he comes across until his inventory is full. He never actually uses them, just collects them. I guess he is American, so it's kind of a fitting trait.

I'm enjoying the levelling for the most part. There are some restrictions that I feel are a little arbitrary - the aforementioned having to lug around a heap of junk from settlement to settlement so you can build water pumps, generators and the like (things that need specialised components you usually can't find by scavenging the immediate environment) because you don't have high enough charisma to open up trade routes to share the resources you've already gathered seems dumb. I can see the point of tying the skill to a stat so that it is something to be striven for, but either the threshold should be lower than 6, or it should be tied into the actual building mechanics in some way - like a trading post or courier service.

I've felt pretty steady progress with my character, though there have been some patches where I haven't been able to level any of my key perks so have had to branch out. There aren't as many perks this time around that feel redundant. There are still a few that serve no real purpose, like Lead Belly (a reduction of rad damage from food and drink). Given how many cooking stations there are in the world there is barely, if any, need to eat irradiated shit.

Aside from these few small gripes, I adore *Fallout 4*. It's one of the most engrossing RPGs I've played in years. I'm currently about 70 hours in and still have a ways to go. Not nearly bored with it either. Between *Fallout 4*, *The Witcher 3*, *Dragon Age: Inquisition* and *Divinity: Original Sin Enhanced Edition*, 2015 has been one hell of a year for RPGs.

**HOLLINGWORTH:** Once again Bethesda has made a game that is far vaster than the sum of its parts, and even if a few of the systems are a little clunky, the sheer depth of experience on offer is sublime. Every time I log into the game it feels like there are untold possibilities of discovery ahead of me, and any number of activities to take part in.

It may be overstating it, but *Fallout 4* could well be the best RPG that Bethesda have developed in quite a while. **DANIEL WILKS & DAVID HOLLINGWORTH**

### OR TRY THIS:



#### THE WITCHER 3: WILD HUNT CDPR, 2015

- ▲ Amazing living RPG world
- ▼ The apocalypse is in progress



#### WASTELAND 2: DIRECTOR'S CUT INXILE ENTERTAINMENT, 2015

- ▲ Incredible tactical combat
- ▼ The wasteland's a bit naff



#### FALLOUT: NEW VEGAS OBSIDIAN ENTERTAINMENT, 2010

- ▲ Probably the best *Fallout* story
- ▼ Limited world

### VERDICT:

A little buggy in true Bethesda style, but still one hell of a game.

9



# Star Wars Battlefront

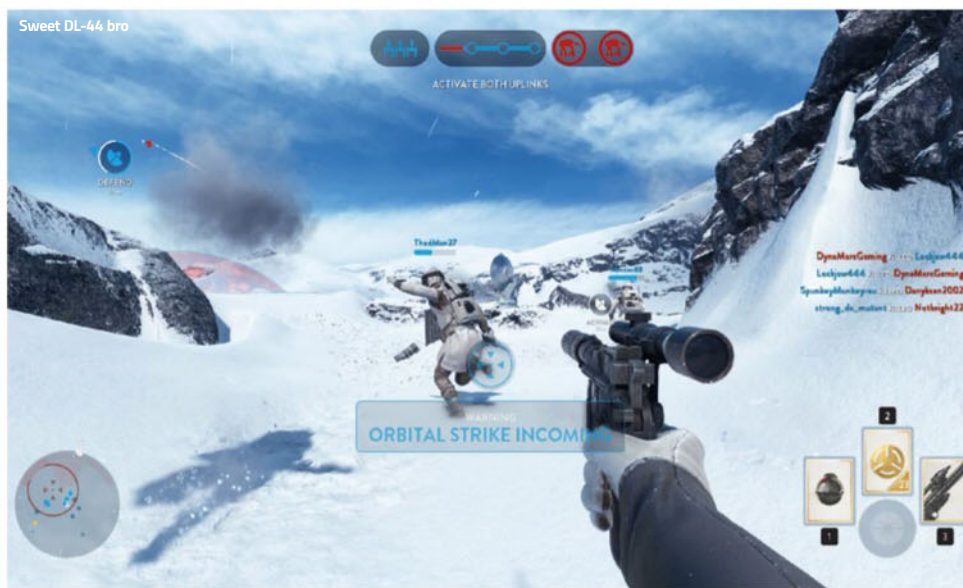
The Force can have a strong influence on the weak-minded.

DEVELOPER DICE  
PUBLISHER EA  
PRICE \$89.95  
AVAILABLE AT ORIGIN, RETAIL  
[www.origin.com/Battlefront](http://www.origin.com/Battlefront)

While playing Dice's reboot of Battlefront, there were many occasions when I had to look twice at my screen to remember I was playing a game and not watching one of the films. Battlefront is a modern marvel of visual technology, a shining beacon of the power to immerse that today's powerful GPUs and CPUs can deliver when placed into the hands of graphics masters like the gals and guys at Dice. It truly comes closer to photorealism than any game I've seen. And yet, as some bearded guy in a flowing brown robe once said, "Your eyes can deceive you. Don't trust them."

Dice's other hallmark, their ability to craft deep, addictive, and nuanced virtual battlefields, that are so fun because they cater to a wide variety of player types, seems to have been forgotten. I'm not sure whether it's because the developer simply didn't have the time to deliver a game with the complexity of its hugely successful Battlefield series, or whether it was a misguided attempt to open up their winning formula to the masses. If it's the latter, I find their lack of faith in player skill disturbing.

If you're looking to buy Battlefront for a bit of singleplayer or co-op with a single other mate, forget about it. There are a handful of vehicle training missions which you'll blast through in half an hour or so, provided you happen to have a control pad handy (more about that later). Then there's the Horde mode, called Survival here, which can be played solo or with another friend, where waves of Stormtroopers rush cramped levels. There's an hour or two of entertainment here at most, as the overly simplistic



There are a handful of vehicle training missions which you'll blast through in half an hour or so

## WHY SHOULD I CARE?

+ You're looking for a game that looks like Episode IV

+ You need something to test your R9 Fury/GTX 980 Ti

+ You want to shoot Ewoks (though sadly you can't kill them)

level design and brain-dead AI makes it a chore before you realise it's a trap to lure in single players.

Multiplayers will initially find the huge range of game types appears to deliver a wealth of different ways to get their Jedi on. There are nine in total, but sadly most of them aren't the modes you are looking for. They're certainly not styles that Dice is known for – they're basically rehashes of team deathmatch and capture the flag, with the occasional sprinkling of iconic Star Wars characters or props used to justify the renaming and reuse of them. They all share small levels in common, but it's not their size that grates on me – they're just bad maps. They're all rather aimless in their design, with

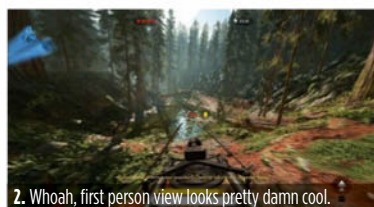
apparently random pathways and a real lack of visual identity to their various sections. Compared to similarly sized maps in games like Call of Duty, Battlefront's feel like they've been churned out without consideration to various tactics. It's no surprise that trying to join these smaller modes just two weeks after launch either ends with the matchmaking starting a new, empty server, or throwing me into an overseas game that keeps telling me network latency will impact my playing experience. Perhaps if Dice had trusted player intelligence enough to include a server browser, this lack of available online games wouldn't be so much of an issue, but apparently Star Wars gamers don't deserve that option.

## SEQUENCE

### BUTTER ON A SKILLET



1. Yes, my childhood dream realised – time to ride a speeder-bike.

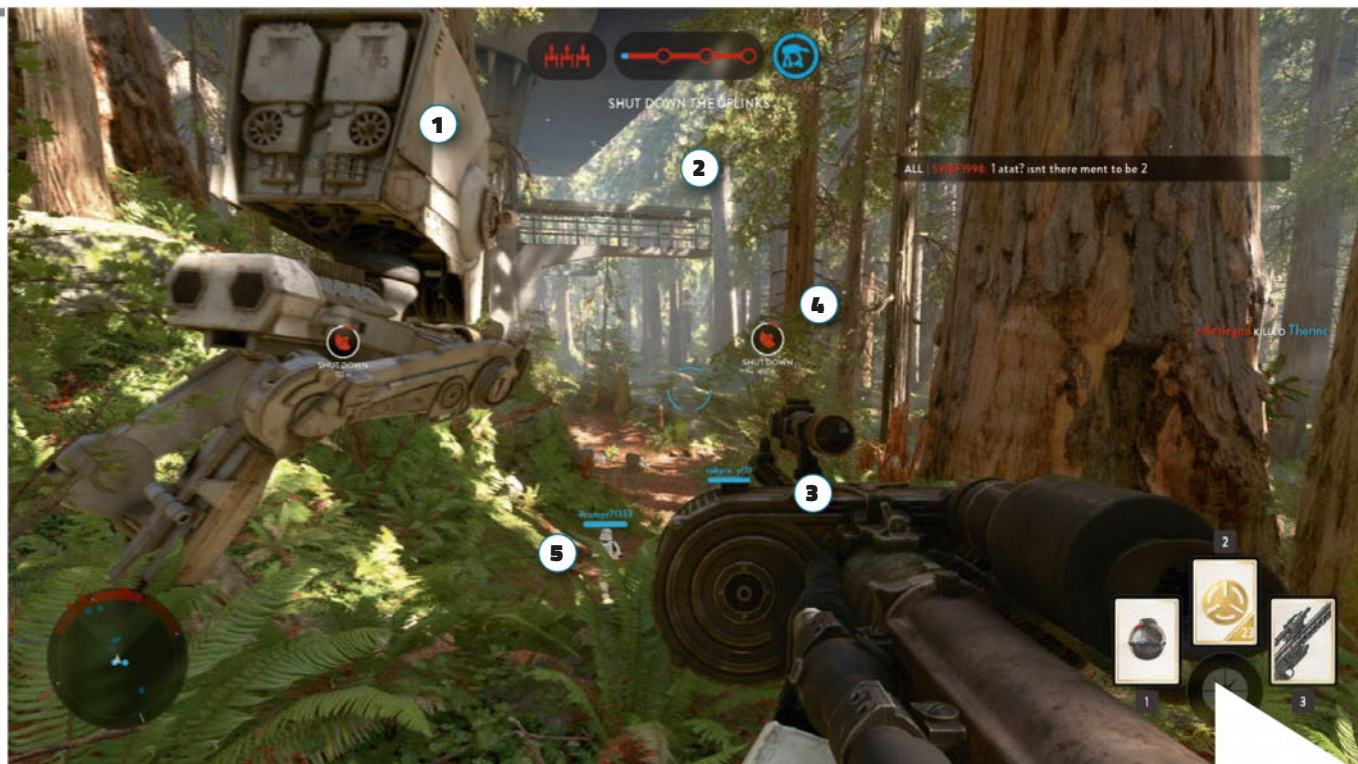


2. Whoah, first person view looks pretty damn cool.



3. Pity the controls with mouse suck so much that death by tree is inevitable.





Luckily there are two modes that go a long way to justify Battlefront's ongoing existence. Supremacy is a straight up 20 vs 20 fight for control points on much larger maps, but it's the epic Walker mode that the vast majority of players are flocking to. One or two AT-AT walkers slowly trudge towards the end of a long, linear level, with two teams of 20 either trying to help or stop them. It's basically a forward-flowing, capture the point game, with the rebels having to cap twin transmitters; hold them long enough and Y-Wings come in to lower the shields on the AT-AT, at which point the rebels can cause damage to them.

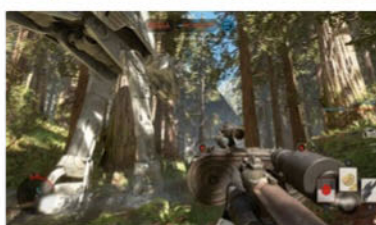
At first it's impossible not to be blown away by the sheer spectacle of it all. Tie-Fighters and X-Wings fight overhead, while speeder-bikes and AT-STs trample the rebel scum underfoot. Players lucky enough to get inside the AT-AT can call in huge orbital strikes, obliterating several enemy players at once. For the first few hours it's damn good fun, but it doesn't take long for the paint to start wearing off these Star Wars toys.

The infantry combat is soon revealed to be simplistic and spammy – crouching or aiming down the



sights doesn't affect accuracy at all, so winning a gunfight turns out to be a case of who shot first or has the best unlocks. There's also no real class system, instead replaced by three player selectable cards which unlock two items and one ability. Yet there's no scope to build any kind of unique role using these cards, say, to act as a dedicated sniper, or a support player. You just keep rushing forward, throwing 'nades, and getting blasted by that guy who unlocked the triple-grenade launcher. It's this lack of player roles that really narrows the scope of the game to a specific type of FPS player, the run 'n gunner.

Making matters worse are the vehicles. The aircraft are utterly unplayable unless you have a control pad nearby – forget all about using a mouse. Dice has also done away with vehicle spawn locations, instead replacing them with random



glowing icons on the map. As a result, in my 20 or so hours of playing this game, I've only controlled the rather overpowered AT-ST once. Apparently they're not that random though, as certain players seem to always control them. Ditto with the hero characters, which are collected in the same way.

Given that only two of the play modes have any longevity to them, the fact that they both share just four maps is gobsmacking. This is a game that is skint on content. And yet... I keep coming back every few days for an hour or two of play. As somebody who grew up loving the films, this is undoubtedly the closest I've been to living out my Star Wars fantasy. Given Dice's excellent - albeit newfound - reputation for post-release support, not to mention a rather hefty and expensive season pass, there is hope for this game yet.

**BENNETT RING** PC

## KILLER TEDDIES

**1.** That's my friendly AT-ST pilot, racking up dozens more kills than those who didn't get a vehicle.

**2.** Endor is the most beautiful level I've ever played in a shooter.

**3.** Notice the scope on top? Using it is entirely optional.

**4.** Apparently we need to shutdown these transmitters to stop the Y-Wings.

**5.** Stormtroopers have clever white camouflage, which works wonderfully against the green rebels on Endor.

## OR TRY THIS:



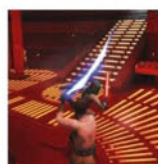
### BATTLEFIELD 4 EA, 2014

- ▲ Great online shooter, almost as good looking, but so much more to do.
- ▼ It ain't Star Wars



### BATTLEFRONT 2 EA, 2005

- ▲ Truly huge battles, all set in the Star Wars universe
- ▼ Slightly janky gameplay and lacks polish



### JEDI KNIGHT II: JEDI OUTCAST EA, 2002

- ▲ Still the best lightsabre simulator ever made
- ▼ Good luck finding players

## VERDICT:

Once gamers discover the lack of depth and content on offer, a million voices will suddenly cry out in terror. Here's hoping Dice pulls this game back from the edge.

**7**



# Hard West

Ready your turn-based six shooter...

DEVELOPER CREATIVEFORGE  
PUBLISHER GAMBITIOUS  
PRICE \$19.99  
AVAILABLE AT STEAM  
[www.gambitious.com](http://www.gambitious.com)

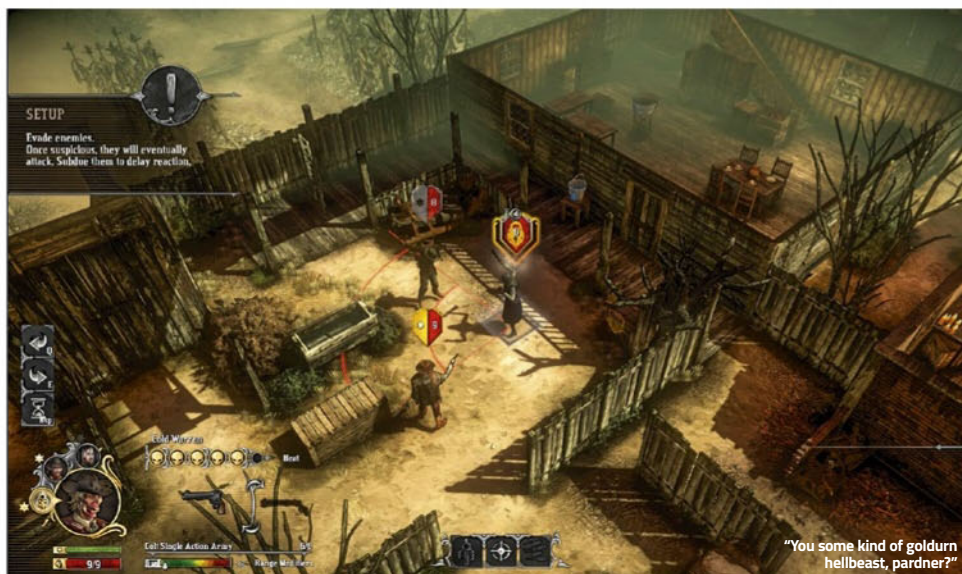
The difficulty in designing a turn-based game is that the little details have to be perfect in order for it to stand out from the crowd. With plenty of time to digest what's happening, and with an intelligent approach the best means of success, the player has every incentive to fully understand even the most unassuming of design choices. It's not a genre that allows developers to hide from their audience. Everything contained within that digital packet will be picked up, spun around and observed in extreme detail.

It's a shame that developer CreativeForge opted for turn-based tactics specifically because of that relentless observation their game opens itself up to. On the surface *Hard West* has everything you'd want and realistically expect from a game that embraces the tough-as-nails Western setting: personal tragedy, unrelenting hardship, callous evil and an aesthetic that channels the visual tone of everything from *The Searchers* to *A Fistful of Dollars*, *Unforgiven* to *Django Unchained*.

Things even take a supernatural turn, doing much to add diversity to what can otherwise be a difficult setting within which to sustain interest after 10 hours or more of playing time.

While the early going is good, thanks in large part to a well-paced chapter system that sees you take the reins of a wide selection of characters, adding to your wider understanding of the world as opposed to certain individuals within it, the game mechanics soon reveal themselves as ideas that lack the sustained interest offered by the best of *Hard West*'s genre peers.

The problem isn't that what's included here is poor as a concept or



■ a game with some great ideas but one lacking the required polish to do them justice ■

## WHY SHOULD I CARE?

- + The voiceover work is brilliantly clichéd, in a tough kinda way
- + Brilliantly realised world that sucks you in and makes you care
- + You hate designers holding your hand within games this is for you...
- + Because there aren't enough Horror Westerns

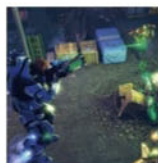
without value as it's implemented, it's just that there's little to excite you once that initial understanding of your options is attained. It seems that the attempted resolution to this issue is to not explain much of anything to the player, with trial and error your only real way of uncovering the intricacies available to you behind the basics of the tutorial sequence.

It's satisfying to work out the rules of stealth or a gun's special ability by yourself - but it's a poor replacement for genuine depth. Hours of play, often spent repeating a failed stage multiple times, are necessary to fully grasp what's going on, but player effort doesn't equate to player satisfaction. The equivalent would be to take part in a math class in

which the textbook is locked away from you, the solution to the problems before you only solvable through plugging away until you hit that eureka moment. A certain kind of personality will love that idea, but most won't.

*Hard West* is a missed opportunity, a game with some great ideas but one lacking the required polish to do them justice. This is one of those instances in which it's difficult to recommend the game to most in its current state, whilst simultaneously tempting you to keep your fingers crossed for a future sequel. With a little more time spent delving deeper into what's depicted here *Hard West 2*, or whatever, would enjoy the kind of foundation that makes a sequel worth tracking. **JOHN ROBERTSON** **PC**

## OR TRY THIS:



**XCOM: ENEMY UNKNOWN**  
FIRAXIS GAMES, 2012

- ▲ Brilliantly well-balanced and varied.
- ▼ You've probably played it already.



**INVISIBLE, INC.**  
KLEI ENTERTAINMENT, 2015

- ▲ Charmingly presented and original aesthetic.
- ▼ Not as memorable as XCOM.



**FROZEN SYNAPSE PRIME**  
MODE 7, 2014

- ▲ You want tension? This is tension.
- ▼ Not necessarily better than its predecessor.

## VERDICT:

Full of good ideas, but few of them are fully developed. More time in the oven would have brought out the full flavour.

6



# SAPPHIRE NITRO

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## Nitro Features



# SAPPHIRE



# Call of Duty: Black Ops III

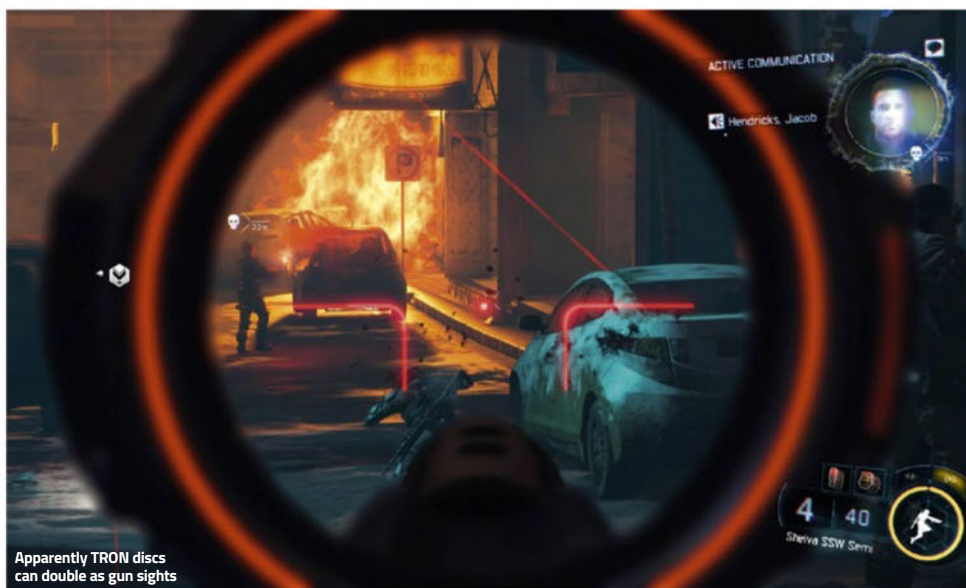
It's finally gone hopping mad...

DEVELOPER TREYARCH  
PUBLISHER ACTIVISION  
PRICE \$59.99 USD  
AVAILABLE AT STEAM, RETAIL  
[www.callofduty.com](http://www.callofduty.com)

Perhaps more than any Call of Duty release before now, the single and multiplayer elements do a wonderful job of reflecting each other's inherent nature. In short: they're both examples of how you convince your fan base that the people behind the game have gone mad. The multiplayer features a new movement system that pitches your abilities somewhere between that of Spider-Man and Boba Fett, while the campaign is an elite example of how to rewrite well-trodden ground in a way that is neither entertaining nor original. Despite that, Black Ops III somehow manages to be not that bad when approached with a certain mindset.

That multiplayer movement system, for instance, which allows you to run along walls and use a jet pack strapped to your back to cover wide gaps and scale previously impossible heights, works exactly as you imagine it should. Resultantly, matches now see friend and foe sprinting towards you at impossible angles and from unusual positions, adding a whole new dimension to the what-and-where of potential dangers.

Problematically, the system is only as good as you perceive it to be. If you're the kind of player that prefers to quietly stalk your prey, accepting that your 'kills' column is going to suffer in your bid to keep your 'deaths' number low, then the jet pack/wall-running mechanics are only going to provide frustration. Then again, if you've always preferred the higher octane approach of relying on constant movement and persistent aggression to score as many kills as possible in the shortest time then you're going to have a great time working out how best to use these futuristic parkour skills to further facilitate your gameplan.



Black Ops III is that annoying kid in the playground always shouting 'look at me, look at me!'

## WHY SHOULD I CARE?

- + The narrative is at least good for a few (unintended) laughs
- + More options than ever for creating custom loadouts
- + Massively rewarding to be sworn at following a successful kill
- + Co-op options provides you the opportunity to make new friends

Still, you can't quite shed the feeling that Call of Duty is struggling for ways to intelligently evolve its core components. As well crafted as the movement might be, it comes across as a novelty inclusion and one whose primary purpose is to set Black Ops III apart from recent releases in the franchise.

What it also does is provide even more context for better appreciating some of Call of Duty's genre peers. Counter-Strike, for instance, has retained a loyal (and growing) player base without resorting to wild additions to its beautifully crafted core. By comparison, Black Ops III is that annoying kid in the playground always shouting 'look at me, look at me!' as he tries some fancy new technique for

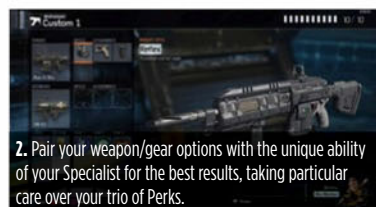
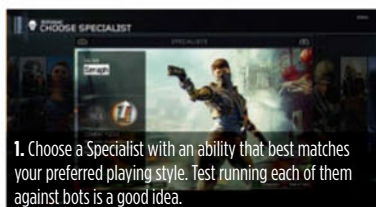
climbing trees or balancing on walls. Eventually, the kid is going to fall and it'll all be over. Activision, then, needs to find a way to reel this franchise in before its struggle for an identity ends with it destroying itself through its obsession with garnering attention.

The supporting tweaks surrounding the competitive multiplayer are altogether more welcome. A 'Specialist' selection screen asks you which character you want to play as, each one coming with a choice of two special abilities and a unique visual identity. This adds a whole new layer to the idea of creating a custom loadout before you've even begun to work out which guns, grenades and Perks you want to take into battle.

It makes sense to opt for a Specialist

## SEQUENCE

### YOU'RE SPECIAL







## SEEING RED

1. You're being shot. In the head.
2. Blurred, bloody screen edges. Another way for you to notice that you're being shot.
3. A futuristic HUD highlights the positions of enemies, even when they're behind cover
4. Your HUD also reveals areas that are dangerous to stand. Red = Avoid.
5. Even in the campaign you have access to special abilities. The yellow bar must be full before you can use them.

packing an ability that matches your playing style. If you're an all-action madman then you could do worse than picking Seraph and her Combat Focus ability, allowing you to more quickly earn points that are funneled towards your Scorestreaks (allowing you to call in UAVs, attack drones etc). Proponents of stealth, conversely, are better served by Outrider and the Vision Pulse ability - allowing you to see nearby opponents through walls for a short time.

A thoughtful combination of Specialist and battle gear genuinely helps in employing your preferred tactics, even though (in general terms) those that are more skilled in running 'n' gunning tend to enjoy the upper hand in most situations.

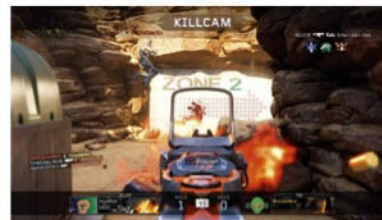
Black Ops III's campaign is similarly suited to one kind of player over another. Again, if you're the thoughtful type, preferring narratives that are mentally stimulating rather than relentlessly energetic, then prepare to be bored and insulted. The plots and characters, and the 'themes' they fail so spectacularly at delivering, are so shallow and terminally brainless that they make One Direction's lyrics acceptable by comparison. It's the kind of narrative that you want to see



to the end, if only out of some sense of macabre curiosity.

Worst of all is that the content of the plot - human augmentation, AI sentience, personal identity struggles - has been explored to death in an intoxicating number of ways from some of the world's greatest ever writers and storytellers. A poorly told story is one thing, a poorly told variation on a story we've already digested is another.

Credit, though, must go to the quality of execution with which the campaign co-op option (maximum four players) has been delivered. Not only does the chat between yourself and your allies prevent you from having to listen to the drivel sprouting from the mouths of the idiots on screen, it conjures a sense of togetherness as you battle through missions that can be surprisingly challenging - particularly when you scale up the difficulty option.



The emergent mini-stories that are conjured up by the four of you covering each other's flanks, helping injured parties up off the turf and discussing how best to divide the available weaponry represent some of the best moments on offer across the entire package. Where the multiplayer relies on novelty inclusions to stay relevant, this year's co-op system does anything but.

It's a schizophrenic entity, then. The campaign's plot aside, what's here works as the design team seems to have intended, but not all of the underlying concepts are as polished or as inclusive as a game that's as staunchly mainstream as this probably should be. If you're part of the kill-everything-and-never-stop-moving brigade then you need (and probably already have) to get stuck in immediately. Everyone else might want to take it for a test drive first. **JOHN ROBERTSON PC**

## OR TRY THIS:



### STAR WARS BATTLEFRONT EA DICE, 2015

- ▲ Play as Luke Skywalker
- ▼ Limited time as Luke Skywalker



### BATTLEFIELD HARDLINE EA DICE, 2015

- ▲ Features cops and robbers
- ▼ Narrative is a bad joke



### COUNTER-STRIKE: GLOBAL OFFENSIVE VALVE, 2012

- ▲ Peerlessly tense and well balanced
- ▼ Visuals too dated for some

## VERDICT:

What's here is fun enough, but the approach forces you to question how long this franchise can survive on novelty inclusions over creative design.

7



# Starcraft II: Legacy of the Void

Entering the void – for the final time

DEVELOPER BLIZZARD  
PUBLISHER BLIZZARD  
PRICE \$54.95  
AVAILABLE AT BLIZZARD, RETAIL  
[us.battle.net/sc2/](http://us.battle.net/sc2/)

**W**hat to do with a problem like StarCraft? It's hard now to remember just how massive the official announcement for StarCraft II was, all the way back in 2007. If only because in the proceeding five years, the professional circuit has become obsessed with the MOBA, leaving StarCraft, once the darling of the eSports scene, tucked against the wall without a dance partner.

That being said, StarCraft is by no means dead. Millions of people watch professional matches. It's just not the darling it once was – which leaves this review in a difficult position. How can you recommend – or not – the third part of a trilogy which invested players are already going to devour anyway?

Maybe like this: if you've delayed picking up StarCraft, now is probably the best time to start. Legacy of the Void also marks a new phase. It is faster than ever, less dependent on your ability to handle multiple units at once, and yet still not for the faint hearted. Maybe moreso than ever.

The meat of StarCraft is its multiplayer, but for newcomers or those who don't particularly enjoy being slaughtered online by experts with 17 years – yes, 17 years since StarCraft was first released – of experience, the campaign is your starting point.

The story is nonsense. Total fairy floss. But it's pulpy and entertaining nonsense, which is the best kind. Smooth voice acting and Blizzard's signature cutscenes ensure the player is pushed through the fluff with a surprising amount of urgency. Enjoy the scenery.

Cliffnotes: The Protoss homeworld of Aiur has been overrun by Zerg. The player – the Protoss warrior leader Artanis – must overcome both Zerg and other warring factions within the Protoss to take it back. Along the way you team up with characters from the previous two campaigns.

Blizzard has few problems in concocting polished, smooth gameplay, but its story department errs on the “bigger is better” side

of things. For a StarCraft veteran, this story will seem rich and fulfilling. For casual fans who played the last campaign sometime back in 2013, it's near incomprehensible.

Thankfully, Blizzard has included a “The Story So Far” video to help people unfamiliar to StarCraft along the way. Watch it.

The video actually speaks to a theme that runs through the middle of Legacy of the Void – a desire and emphasis on making newer players feel more comfortable. With MOBAs taking flack for being just as complex, anything StarCraft can do to make itself easier is welcome.

There are small things. The game points you towards buttons that, for instance, select your entire army, or control idle workers. Small, but necessary changes to hand hold newer players who don't know where to start. This is welcoming without reducing the campaign into cakewalk. Which it isn't.

The crux of a StarCraft single player campaign lies not in building bases and



Red Vs Blue sure looks different from what I remember





## SHAKE SPEAR

**1.** The Spear of Adun interface lets you choose power-ups to use in each mission. Mix and match as you want.

**2.** You must construct additional pylons. You must construct additional pylons. You must constr-

**3.** Each mission will contain bonus objectives for more XP and rewards. They keep missions fresh.

**4.** The campaign does a good job of putting you up against units from all factions, including your own.

**5.** New "select all" buttons make micro easier for newbies.

creating units. Oh, that's part of it, to be sure, but the real fun comes in the restrictions the game places on you.

The problem with Heart of the Swarm, even with a nicely designed campaign, was that Sarah Kerrigan was always just a little bit too powerful. Her powers were simply too overwhelming for you to lose most of the time.

This has been paired back some in Legacy of the Void. Alongside the normal base creation and units are two customisation options. The first is an array – controlled through your ship, the Spear of Adun - of four possible powers that can be used throughout any mission. Powered by energy that refuels over time, these can be

anything from an orbital strike to warping in a pylon and some units.

They're ultimately too powerful, but a cooldown helps mitigate your warpath. I appreciate the choice. For instance, in some missions I chose to have pylons and units available to warp in at any time, along with an ability that gives a supercharged Chrono Boost, allowing units and buildings to be made even faster.

The second customisation option is less powerful, allowing you to choose which of two units you get to build as part of your base creation – from one of two factions. They differ slightly but it mostly comes down to preference.

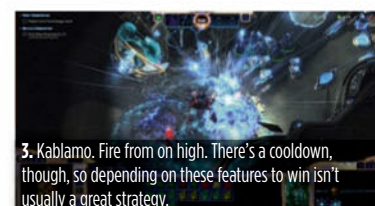
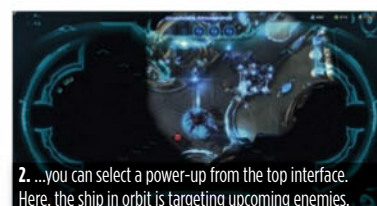
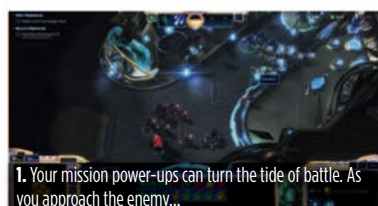
The missions are fine. Just that – fine. They're the same formula used

in the previous campaigns, used to showcase campaign-only units, and it tells the story as well as any of the other instalments. The few opportunities you have to control heroes with substantial power on the battlefield are fun enough. And missions with time restrictions force you to think quickly. One mission forces you to stop a platform plummeting through space. These types of restrictions force you to become familiar with units you may not have otherwise used, and in that sense, they work.

But in the spirit of making things more accessible, the new co-operative and Archon modes are a better "in". In co-op players choose a race, a leader

## SEQUENCE

### YOU HAVE THE POWER!









and team up to tackle objectives that provide new units and XP. It's fun to work with another player, albeit with a complicated UI at times. And the mode provides some extra value for units that aren't available in competitive multiplayer.

For more advanced teams Archon mode lets you field a single army, commanding together. Like anything co-operative, the value of Archon mode will depend very much on who you're playing with. If you can't communicate, you're toast. Best left to vets.

Really, though, the heart of StarCraft is in competitive multiplayer and there lie the biggest changes. In fact, Legacy of the Void may represent the biggest transformation to competitive StarCraft ever.

It's hard to overemphasise just how critical the smallest changes can be. Altering a cooldown time for a second or two can up-end years of carefully drawn-out strategies. Just as chess masters have their favourite opening moves, build orders and upgrades in StarCraft are more science than art, and any changes can upset that balance.

So a drastic change like upping the number of starting workers to 12, from six, increases the pace of the game by a huge amount. The action starts sooner. More expansion points in many of the competitive maps provide new opportunities for offensive strategies – and lovely skirmishes. New units, such as the Terran Cyclone, can attack while moving, drawing the frontline closer to a potential ambush, (if you so choose).

StarCraft is a delicate balance. Introducing new units – such as the new Adept for Protoss, which can control a decoy of itself on the battlefield – upset that balance. In a good way. There are more ways to probe or attack an opponent at the outset of the game, and that combined with the faster resource gathering means the action will start sooner.

Having been used to techniques used in Heart of the Swarm, I found



## Legacy of the Void may represent the biggest transformation to competitive StarCraft ever

### WHY SHOULD I CARE?

+ You enjoy DOTA but get the feeling there could be... more

+ You've already played the first two and, hey, why the hell not?

+ You've always wanted to try StarCraft but have put it off. Get into gear!

playing competitively in Legacy of the Void meant thinking about big-picture strategy far earlier. There's no time for messing around before getting serious. As a result, StarCraft is pushing you to think more about how to control the battlefield from the very first second.

One of the most important parts of an opening game is harassment. You send a unit or two to annoy your competitor to distract them from gathering resources. Upping the resource gathering means harassment starts sooner, and other units like the aforementioned Adept provide a better way of getting past enemy lines.

Another example of how the quicker pace can change the tide of battle: previously, Terran Siege Tanks were only able to be transported in their standard, normal mode. Now, they can be transported and deployed in Siege Mode, which allows them to pummel enemies with deadlier blasts. Saving the second or two it takes to deploy these tanks in Siege Mode once past enemy lines can mean the difference between victory or defeat. Or at least, the outcome of a skirmish.

One feature newer players may

enjoy is the addition of Automated Tournaments – timed tournaments that match you up against other players. Sign up, participate in matches with three or six rounds, and win trophies to show off. It's a way of feeling like you're participating in the professional competitive community with people at your own skill level.

Legacy of the Void is a curious mix. While MOBAs have done more than their part to ensure new players are given as much hand holding as possible, the latest StarCraft changes reinforce just how complicated and technical the game can be. And yet, Blizzard isn't pushing anyone away. If you've waited long enough to get into StarCraft, new features, modes and helpful tutorials mean you're certainly not out of the loop yet. In fact, it's probably the best time to start.

Just don't think it's going to be easy.

StarCraft is hardly going to reach the high spectator counts and interest it would have in 2010. The market for strategy games has changed too much. The franchise is Pepsi to MOBA's Coke. But the new flavour has arrived – and it's pretty damn tasty. **PATRICK STAFFORD**

### OR TRY THIS:



#### LEAGUE OF LEGENDS RIOT GAMES, 2009

▲ Huge popularity means great support.  
▼ Complex and cumbersome for newbies.



#### TOTAL ANNIHILATION HUMUNGUS ENTERTAINMENT, 1997

▲ Among the best RTS games.  
▼ It's old – opponents are few.



#### COMPANY OF HEROES RELIC ENTERTAINMENT, 2006

▲ Realistic take on war strategy.  
▼ Long in the tooth

### VERDICT:

An entertaining end to the trilogy that both welcomes newcomers and establishes StarCraft as the most complex and unforgiving game in strategy.

# 8



## Terran Incognito: Inside the Nova Covert Ops

JOAB GILROY never saw it coming

With the release of StarCraft II: Legacy of the Void, Blizzard's iconic RTS has reached a point considered 'complete'. The game first launched five years ago, when stage one of the game's release took players through the Terran portion of the saga -- since then, they've released the Zerg focused Heart of the Swarm and, just recently, the aforementioned Protoss standalone expansion.

For the longest time, the promise of the next expansion has been the extent of Blizzard's commitment to campaign focused StarCraft fans -- while multiplayer has seen half a decade of balance changes and updates, the only real differences for those who play the game alone come in massive, biennial story packs. At Blizzcon this year, however, the StarCraft team committed to abandoning this cycle -- starting with Nova Covert Ops, a mission pack aiming for release in Autumn 2016.

"There are actually more players who play campaign than there are multiplayer

players," Tim Morton, StarCraft II's Lead Producer, told us when we caught up with him at Blizzcon. A big friendly giant, Morton always wears a smile and speaks softly (so spare a thought for my transcription efforts!) and his enthusiasm for StarCraft seems limitless.

"The multi-player players stick around the longest, because that has organic replayability," he continued. "So we looked at that and said, 'Wouldn't it be great if we were also able to provide continuing engagement for campaign players?' This will be our first effort in that direction. A series of mission packs, called Nova Covert Ops, telling a little bit more of a character story around Nova, rather than a save-the-cosmos kind of story like the Starcraft I and StarCraft II story arcs. It's a chance for us to experiment a little bit, and hopefully bring fans content that they'll be excited about."

### NOVA: TAKE TWO

This isn't the first time Nova has been promised her own story, mind you. Some of you might recall StarCraft: Ghost, a third person shooter announced in 2002 and put on 'indefinite hold' in 2006 --



Wouldn't it be great if we were also able to provide continuing engagement for campaign players? "

Covert Ops will not be that game, and Blizzard were careful to make sure people didn't mistake their new update for the cancelled shooter, deliberately calling it an RTS mission pack. We asked him why they decided to go in that direction with the game.

"I'd say, knowing that she's a fan favourite had some influence on our choice, but the team itself just really felt like being a Ghost is such a compelling fantasy," he said.

DEVELOPER BLIZZARD  
PUBLISHER BLIZZARD  
DUE AUTUMN 2016  
[us.battle.net/sc2/](http://us.battle.net/sc2/)







SCREENSHOTS ON THIS PAGE FROM LEGACY OF THE VOID

“And Nova, as a character, has played an intriguing part in the storyline so far, and it felt like there’s so much more depth there that we could explore.”

“[But] it’s actually an effort for us to get content in players’ hands more quickly. In a lot of ways, we’ve been inspired by what our fellow developers upstairs--our Heroes of the Storm team--has done in terms of continuous content delivery. We’ve gotten feedback over the years from players that we take too long between releases for Starcraft, and they really wish we had a more steady cadence to our content release. From a, ‘How do we pull that off?’ perspective, the team still has a lot to learn about delivering content quickly, but we’re really up for the challenge.”

#### A FASTER CYCLE

And a challenge it will be. Blizzard has traditionally done an amazing job at using their other games as experimental laboratories for concepts -- World of Warcraft: Legion is drawing inspiration from Hearthstone’s Daily Quest system (which Hearthstone itself initially stole from World

of Warcraft) for example. So while a lot of Nova Covert Ops will be uncharted territory for the StarCraft II team, they have a lot of experience to draw from -- both internally and externally.

“We’ve never done episodic content before,” Tim explained. “From a storytelling perspective that’s very interesting. From a mechanics perspective, we’re going to have an equipment system for Nova, so you’ll get to really tailor her abilities. If you look back on how the Terran faction was treated in Wings of Liberty, Raynor’s raiders are kind of a scrappy mercenary element of the Terrans. In Nova Covert Ops, Nova’s got the backing of the full might of the Terran dominion, so sort of unlimited resources to put behind the gear that she’s using. It has a very distinct feel to it, so definitely, there are some new game mechanics that’ll be there.”

“Just how she outfits her unit, what unit composition does she choose, stuff like that,” he said when we pressed him for details. “That’s something that’s somewhat consistent with the other games. We always provide some amount of customization

there. We did want to carry that mechanic forward, and there will be some new choices, I’m sure, that play a part of that.”


#### HEROES OF THE FORM

To customise Nova players will get the opportunity to change her loadout in four slots -- her helmet, her body armour, her gadget and her iconic weapon. Fans of other Blizzard games will know that Nova as a hero character is already quite fleshed out -- especially in Heroes of the Storm, where she is a popular ranged assassin.

This move to a speedier release cycle will probably be great for StarCraft II and its fans, who have definitely been at the mercy of Blizzard’s methodical scheduling for some time. Multiplayer fans can rest easy knowing that instead of negatively impacting balancing patches for the online portion of the game, StarCraft II development is getting more streamlined as they draw inspiration from Heroes of the Storm.

“You know, there’s a lot of great back-and-forth between the Heroes team and the Starcraft team because so many Heroes team members got their start on the RTS team. I’d like to think that there’s some cross-inspiration there,” Tim said, laughing when we asked whether it was her success in Heroes of the Storm which lead to her lead role in the mission packs. There are a number of StarCraft heroes available in Heroes, but apparently even amongst the team she’s one of the most popular.

To wrap things up, we asked if they knew which hero would get the RTS Mission pack next.

“I think all options are on the table in the future, but we haven’t made any decisions about what’s after Nova,” Tim answered. For the record, we told him it should be either Sergeant Hammer or Abathur. 





# Assassin's Creed Syndicate

The silver lining to Unity's rot?

DEVELOPER UBISOFT QUEBEC  
PUBLISHER UBISOFT  
PRICE \$60.95  
AVAILABLE AT STEAM, RETAIL, UPLAY  
assassinscreed.ubi.com

After the disaster that was Assassin's Creed Unity, the best thing Ubisoft could do with its latest attempt at faux-historical recreation is take it back to basics. Help us remember why we still so consistently gift the series so many column inches. Forget the gimmicks, bin, the slew of back-of-the-box features and, most importantly, make sure the thing works as players might reasonably expect it to.

Cynical as it undeniably is to begin a review of a new game by referencing the dismal last, it feels like it's the only way to accurately position Syndicate within the realm into which it has been released. Here's a game that not only has to stand on its own two feet, but one that has to undo the deep scuff marks left on what was once a landmark franchise by a lazy and, frankly, financially greedy release. No pressure, then.

Nowadays England is hardly known for its progressive thinking and welcoming populace, quite the conservative opposite, but that's the arena decided upon to catapult Assassin's Creed back into our hearts. Victorian England, at least. It's a dark and grimy place, full of dust and dirt, fighting men and worse. However, it feels right - the kind of place perfect for a traitor to exorcise their demons and come out the other side cleaner, forgiven and, at the risk of overdoing the Biblical sentiment, reincarnated.

To assist Syndicate through this trial by fire a few new friends have been bestowed upon it. The best of these is the grappling hook, a tool that brightens up what has over recent years become a traversal system still living on past merits. With hook in hand you can fling yourself up the



When I said "a-la carte" I wasn't speaking in slang

Here is where the vehicles come in, ridding travel of the awful, snaillike trudge that characterised Unity

## WHY SHOULD I CARE?

+ Knocking down a guy in a bearskin hat is on everyone's bucket list

+ Because you have always wanted to ride a London train in digital

+ You want to race through London in a horse drawn carriage

+ The best Assassin's Creed environment since the second game

Gothic architecture of Westminster Abbey, zip along the glass ceiling of Victoria Station and, of course, use it to drop safely down onto the heads of guards patrolling Buckingham Palace.

Given the sheer volume of Assassin's Creed releases, clambering up tall buildings to absorb the view is no longer an act imbued with a sense of adventure or aspiration. It's simply par for the course. The grappling hook reinvigorates the process, though, removing the grind that accompanies familiarity and making the result of your climb, rather than the climb itself, the main event. This allows you to spend more time planning infiltrations and escapes, less time worrying about the tiny details of their execution.

The hook is good for moments when you want to up the pace of your own human locomotion, but it's not so well adapted to longer journeys. Here is where the vehicles come in, ridding travel of the awful, snaillike trudge that characterised Unity. It's here that Syndicate offers the most realistic representation of anything Assassin's Creed has ever recreated: British trains that are never there when you want them, and rarely go where you expect when they do show up. Someone at Ubisoft has been doing their homework.

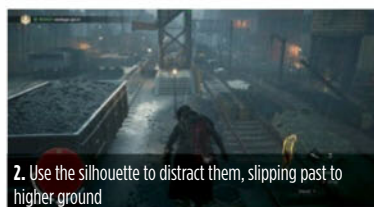
Less sarcastically: the new horse and carriages are implemented in a way that retains the series' desire to provide emergent, unpredictable gameplay.

## SEQUENCE

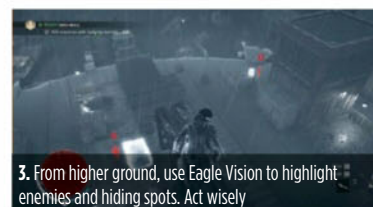
### ANATOMY OF MURDER



1. A silhouette appears indicating where enemies think you might be

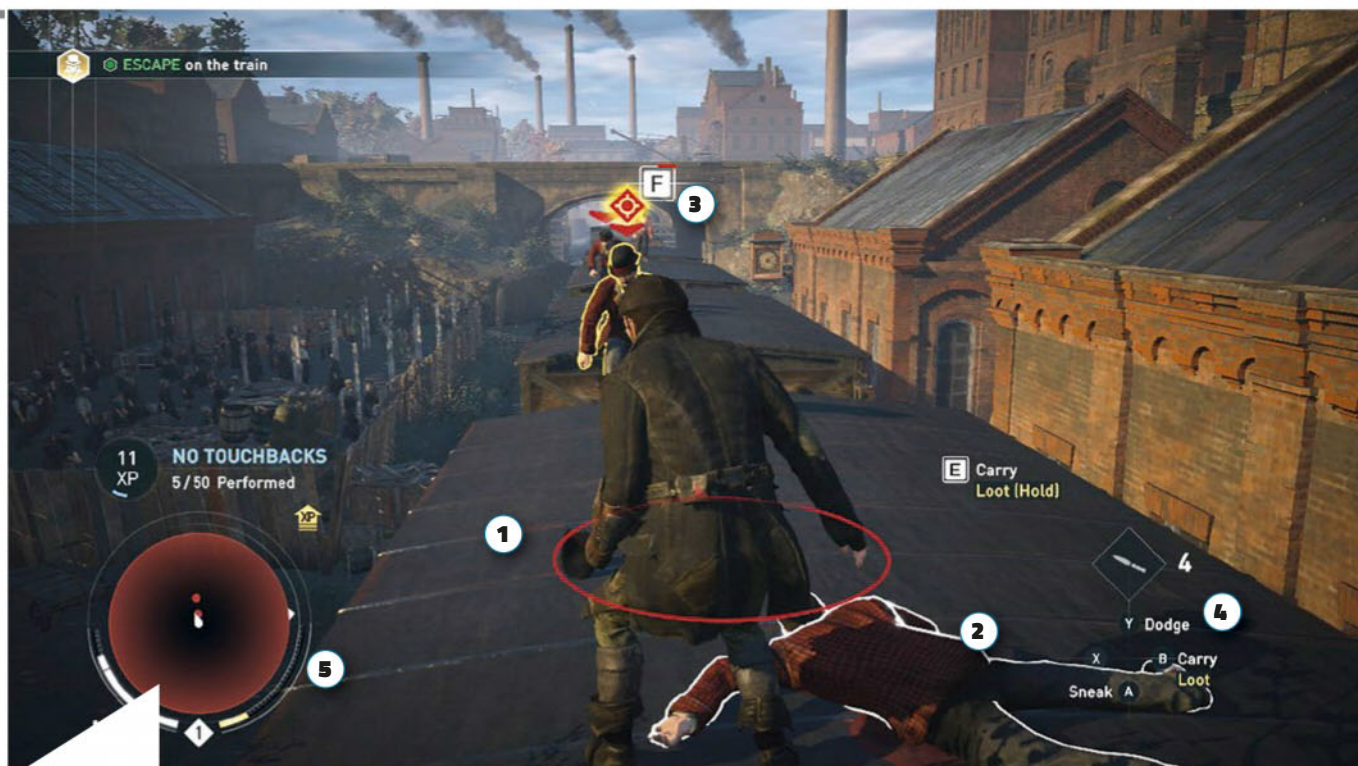


2. Use the silhouette to distract them, slipping past to higher ground



3. From higher ground, use Eagle Vision to highlight enemies and hiding spots. Act wisely





## RIP RAPS

**1.** The ring around you indicates how stealthy you are being. Red means you've been seen.

**2.** Some downed enemies can be looted

**3.** The target reticule above an enemy means they're readying a shot at you. You have limited time to press the button floating above your head to avoid damage.

**4.** These are your available context sensitive actions. It pays to memorise these.

**5.** Keep an eye on the radar during combat. It can be difficult to keep track of enemies behind you given the relatively tight camera.

More than just a means for getting more A to B more quickly, they can be used for everything from transporting incapacitated enemies to a source of income through winning races.

With the London setting significantly larger than Unity's Paris, the combination of grappling hook and carriage is more essential inclusion than optional engagement. The fact that both are offered in such a way that makes them feel like part of the world and as part of the leading cast's fictional reality is testament to good design, removing any sense of production simply as a means to fill in technical gaps.

The same can be said about London itself, which is more than merely a set of interconnected landmarks. Various boroughs alter in architectural tone and density, but they're made into a cohesive whole through the manner in which missions, both main and optional, straddle their boundaries without undermining their status as places with individual identities.

In large part this comes down to the famous faces located across the city, giving you extra help when it comes to embedding regions with a sense of personality. Karl Marx, Charles



Dickens, Florence Nightingdale and more are romantically presented and just about complex enough to allow you to overcome any pre-existing historical knowledge you might have that would shatter your suspension of disbelief regarding the nature of their inclusion. Without them, Syndicate's London would merely feel like the technically impressive adult playground that it ultimately is.

Further, their absence would spell doom for your narrative intrigue. For all its evolutionary improvements and new additions, disappointment comes in the form of a plot that is perfunctory at best, inane at worst. Strip away the periphery relationships, the storytelling inferred by the environment and the (generally) decent voice work and they've got a narrative that bears all the worst hallmarks of mainstream videogames.

Empowered by The Blighters, a street gang running the London underworld



through violence, is Crawford Starrick, an antagonist so two-dimensional that he'd become invisible if he were to turn sideways. Well, he would, if it wasn't for the brutally predictable nature of his oversized moustache. You can't be evil in the Victorian era without a moustache, and you can't be good with one. It's all horribly formulaic.

You might argue that Starrick's simplicity works as an antidote to the ridiculous, not-as-smart-as-they-think-it-is, characters and events delivered by Assassin's Creed's writers in previous games. Perhaps that was the plan, but it's not one that has been successfully fulfilled. While the activities presented by London and its missions are better than this series has seen for a long time, you can't help but groan at the underlying reasons you're given for embarking upon them in first place.

JOHN ROBERTSON PC

## OR TRY THIS:



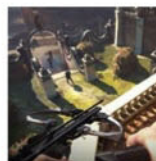
### METAL GEAR SOLID V: PHANTOM PAIN Kojima Productions, 2015

- ▲ Brings Metal Gear into modern times
- ▼ Multiplayer is not single player's equal



### BATMAN: ARKHAM KNIGHT Rocksteady, 2015

- ▲ Better grappling hook than AC: Syndicate
- ▼ Tank sequences are terrible



### DISHONORED Arkane Studios, 2012

- ▲ No limits as to how you approach missions
- ▼ Visuals have been well and truly better in subsequent years

## VERDICT:

A huge raft of upgrades and new ideas make this the best Assassin's Creed in a very long time, but it misses out on greatness thanks to its shallow narrative

8



# Just Cause 3

Ah my beauty, past compare... [explosions]

DEVELOPER AVALANCHE  
PUBLISHER BANDAI NAMCO  
PRICE \$59.99  
AVAILABLE AT STEAM, RETAIL  
[justcause.com](http://justcause.com)

The good news: within four minutes of starting Just Cause 3 you can indeed drive a sports car through a field of sunflowers. The bad news? This isn't emergent gameplay, but rather a scenario the developers clearly set up to happen.

As a piece of visual art, Just Cause 3 is almost beyond criticism. Its crisp realisation of a vast Mediterranean archipelago combines the best of what today's PCs can do, when it comes to texturing, visual effects, physics-based destruction and lighting. Which is why it's such a shame there's so little game to back all this up.

Just Cause 3 is essentially a streamlined version of Just Cause 2 with next generation graphics. It's simpler, more direct. The player gets toys quicker, can replace broken ones more easily, and can move around the huge map more fluidly.

Instead of three bandit clans and the Agency all clamouring for Rico Rodriguez's attention, there's just a plucky band of rebels who want to reclaim their beloved country of Medici from the cartoonishly evil General Sebastiano di Ravello.

And it's surprisingly easy for them to do so. All it takes is for Rico to parachute or wingsuit into a settlement, blow up an itemised list of "chaos objects" and - if it's a town - raise a flag. Then, before your very eyes, the settlement grows Rebel graffiti, and military vehicles convert to their blue-paint-spattered Rebel equivalents.

The game is open world, and Rico is free to travel around the whole country blowing up pretty much whatever he wants. More extravagant destruction invites a proportionate response from



Like so many physics-based games before it, only CERTAIN THINGS in Just Cause 3 can explode

## WHY SHOULD I CARE?

+ You want to drag a the head of a dictator's statue through the streets while firing rockets at a speedboat

+ You don't want to be distracted by choice or consequence

+ You want to set off bombs without worrying you might damage the architecture

+ Cow fetish.

the unambiguously evil military. Go in on foot, and it's just commandos. Hijack a Navajo combat chopper and start raining missiles, and Rico will soon have to contend with tanks, other choppers, maybe even a jet or two.

Combat in Just Cause 3 is a system of challenge management. Go in too hard and the game bites back, overwhelming the player with a hail of bullets. There's no stealth, of course, but finding a good position and picking off enemies with hand-held weaponry will give enough breathing space to, say, hack a SAM site or set a few explosives on those chaos objects.

In Just Cause 2, Rico's Chaos rating unlocked further missions and abilities. Here, it seems to be little more than

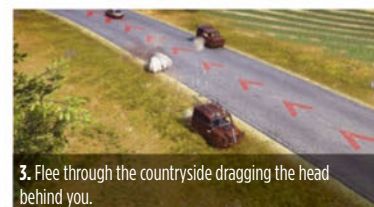
a score. Instead, Rico must liberate settlements and provinces, eventually saving entire regions from di Ravello's depredations.

So much for the story. Just Cause 3 is primarily concerned with giving you ways to blow stuff up, and in this it succeeds very well. In fact, there's two main ways to play the game - do the story missions and purse your lips at the repetitive nature of their design, or you can treat the game as a sandbox. Find a road bridge, rig it with explosives, go and shoot up a roadblock and then as the enemy comes rolling across the bridge in convoy, trigger the explosives and see them all plummet into the ravine.

Or simply see what you can tether to other things. Can you get that tiny car

## SEQUENCE

### THINGS TO DO IN MEDICI







## THE EXPLODO

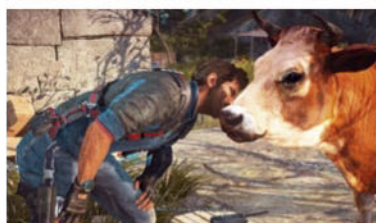
1. These icons show which "chaos objects" need to be destroyed
2. Rico carries dual-wield, heavy, and special weapons all at once now
3. Tear a minigun off its stand for extreme destruction
4. Big weapons have infinite ammo. JC3 is all about keepin' it simple
5. In a combat zone, the "heat" is always on
6. You'll spend a LOT of time following this blue waypoint marker
7. Online rankings update in real time Can YOU be #1 in murder?

onto the deck of the fishing trawler? Yes you can. Can you hoist the whole thing into the sky under yet another bridge? Why yes. Can you use a rocket upgrade on your explosives to set the trawler swinging and then exploding in a manner beyond the wildest dreams of Michael Bay? Yes, yes you can.

And yet like all games with incredible visual fidelity, Just Cause 3's graphical brilliance highlights rather than forgives its bizarre lapses in gameplay logic.

Take the endless, modular, identical Ibero-Italian coastal villages that Rico must liberate. Each is infested with propaganda speaker towers, apparently evil electricity generators, billboards and di Ravello statues. To liberate the town, simply blow them all up. So you fire rockets into a billboard or drop bombs on a speaker tower to spectacular effect, and yet not a single loose terracotta tile on a single civilian rooftop is disturbed.

It seems the most obvious bit of gameplay to say "you can shoot up the village but if you destroy too much of it, you fail the liberation". But no. Like so many physics-based games before it, only CERTAIN THINGS in Just Cause 3 can explode.



The way the army spawns in to deal with Rico's indiscretions is also occasionally infuriating. Okay sure, maybe those helicopters popped up from behind the hill. But when Rico is holding the only gate from the harbour to the open ocean and Rebel gunboats are clogging that narrow waterway... how the hell did the army get an 80 foot destroyer into the middle of this naval base?

Because of the way it looks, the most obvious comparison Just Cause 3 invites is with GTA V. Both games promise freedom and both have various restrictions. But GTA V does a much better job of disguising the fact that every mission is "drive here, maybe shoot someone". All it takes is narrative, and variety.

Where Los Santos and surrounds has been meticulously hand-crafted to possibly insane levels of granularity,



Just Cause 3 is modular game design at its most obvious. Every town is made up of the same orange-roofed houses, every town hall where you raise a flag has the same portico. Every military base has the same collection of chaos objects and guard towers and stupid piles of barrels marked "Explosive!" stacked just so.

But here's the curious thing. This game is undeniably fun, addictive even. Stealing a jet and using it to blow up an oil rig... that's quality gaming right there. Making a statue smack itself in the face, like you saw in the trailers, that's worth the two-minute set up.

Just Cause 3 feels like a missed opportunity, an amazing engine used to create a trifle of an entertainment. But if you want simplicity, if you want a game that's just "click left mouse to make big explosion", well maybe it's worth a few hours.

ANTHONY FORDHAM **PC**

## OR TRY THIS:



### JUST CAUSE 2 2010, AVALANCHE

- ▲ The same game for like \$15
- ▼ No physics-based destruction, boo



### GTA V 2013, ROCKSTAR

- ▲ Superior world-building and mission variety
- ▼ Has a... special sense of humour



### CRYSIS 2007, CRYTEK

- ▲ Better physics-based destruction, 8 years ago!
- ▼ Falls apart in second half

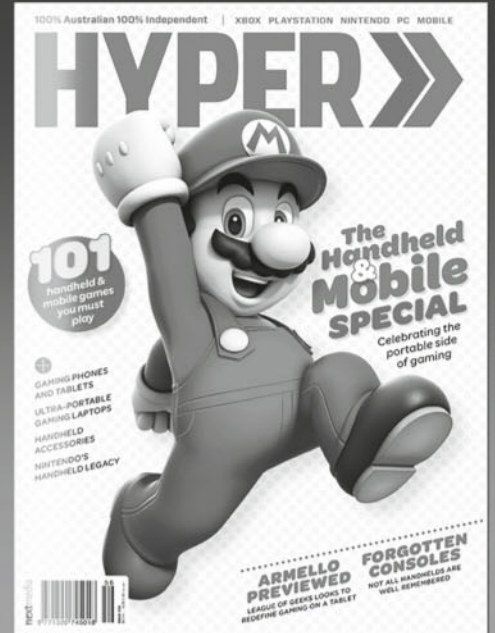
## VERDICT:

A visual and SFX tour-de-force uninterrupted by such trivialities as depth or complex gameplay

7



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# Rainbow Six: Siege

Stack up, and prepare for breach.

DEVELOPER UBISOFT MONTREAL  
PUBLISHER UBISOFT  
PRICE \$60.95  
AVAILABLE AT STEAM, UPLAY, RETAIL  
[rainbow6.ubi.com](http://rainbow6.ubi.com)

**R**ainbow Six is a remarkably malleable franchise. It started out as the tent pole to a whole series of books and follow-on games featuring the eponymous Rainbow Six team, and a roster of Special Forces operators from around the globe. It melded tactical planning with a split second, unforgiving ballistics model, and cemented the series as one of the classic tactical shooters.

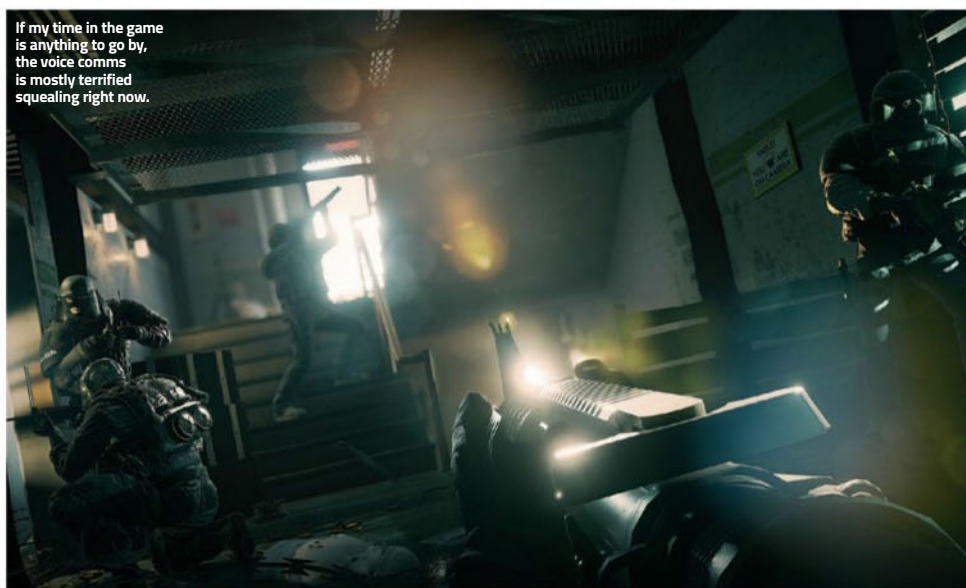
It became a more traditional shooter through Rainbow Six: Vegas, and moved away from the established Rainbow team, while also ditching the planning phase – it was still very tactical, and at times very challenging, however, but it did seem watered down some.

Now Siege continues to iterate on the basics of the franchise, both harking back to the first game in some ways, while being unrepentantly modern in some of its other approaches. Perhaps the biggest addition to Siege is the ability to not only blow through and destroy certain walls and other surfaces, but also to reinforce those same walls, or place traps and obstacles.

Back in the good old days, Rainbow Six split its missions into two distinct phases – you'd have the planning phase, where you could map out your assault, ordering your troops to breach at certain places, at certain times. Then you'd have the action phase, where those plans would succeed or fail, or – more often – be forced to morph into something else after contact with the enemy.

The new Rainbow Six: Siege harks back to those early iterations of the game, though its planning phase is a very different beast, and it only comes into play in the game's PvP multiplayer. It's also not nearly as

If my time in the game is anything to go by, the voice comms is mostly terrified squealing right now.



## repeat play suggests that some defensive strategies are better than others

### WHY SHOULD I CARE?

- + You hate doors
- + You hate walls
- + You really miss classic Counter Strike
- + Bringing a sledgehammer to a gunfight seems sensible

cerebral, though mastering it is essential to victory. Instead of getting access to a top-down map, every attacking player gets to control a wheeled drone, with which they can scout the enemy forces; the enemy, of course, can attempt to destroy the drones, but given this is also the time when they should be placing their defences and making their own plans, that's easier said than done.

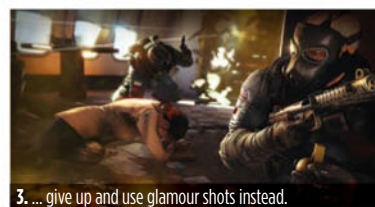
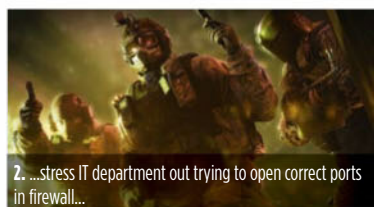
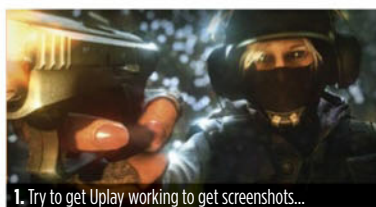
It's very fast, and clever breachers can not only learn where and what defences are in place, but also what individual operators are facing them. It may not be as in depth, but it's nonetheless arguably the most critical part of the game – victory will almost certainly go to the team with the better preparation.

But it will also go to the team with the better map experience. While there's a good variety of maps in Siege out of the box, they still offer up the same limited options each time, and while you can vote to spawn at different locations for both attack and defense, in action this has very little effect on gameplay. Once you've got the various breachable walls and floors tucked away in memory, there really are some options that are simply better than others.

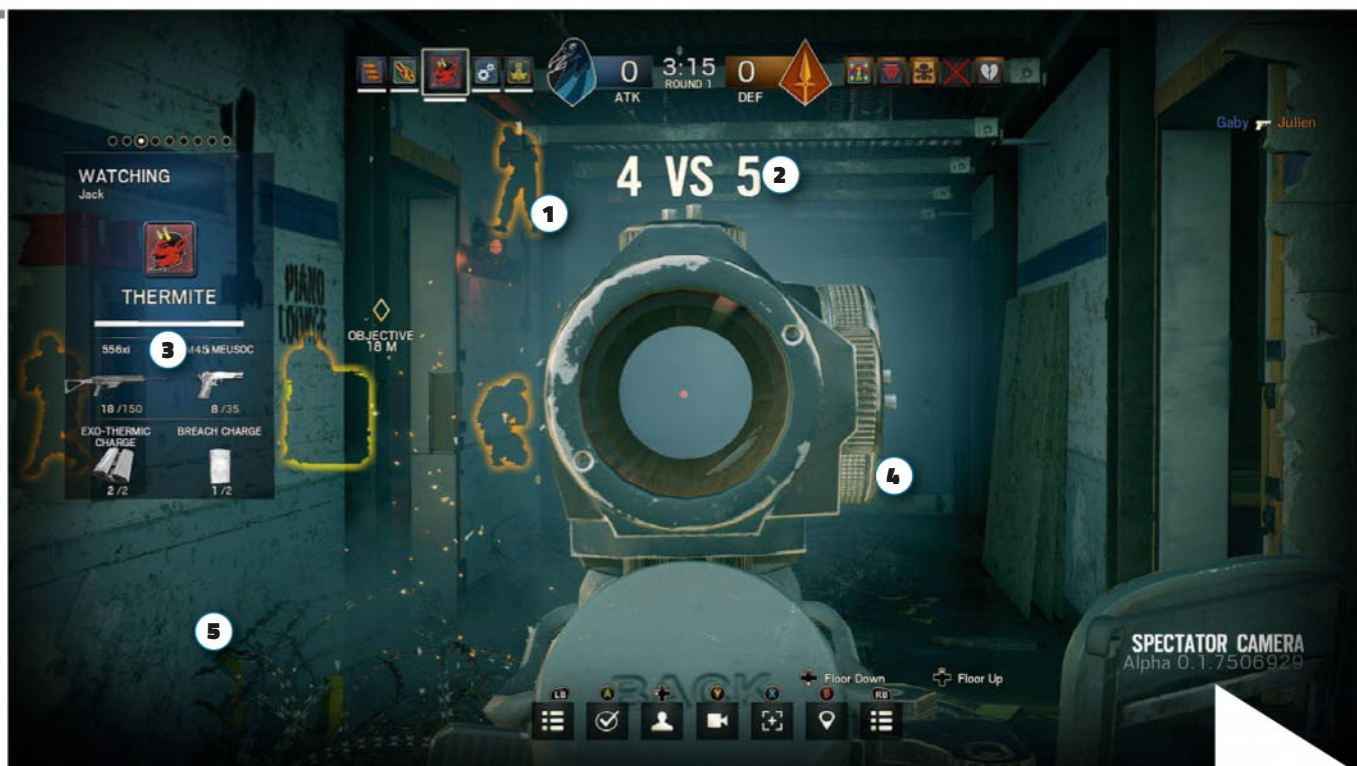
The defenders' ability to place their own new walls, obstacles, and even mounted weapons does change that up, though, but – again – repeat play suggests that some defensive strategies are better than others.

### SEQUENCE

#### PORT SIEGE







The game is further enlivened by the various operators to be unlocked. These are split into various Special Forces types based on real-world units, and split again into either attackers or defenders. There are some very interesting options in this part of the game, though some choices seem better suited to the CQB style of action that Siege is trying to represent. Various medics and heavy types are excellent while defending, and various explosive or tracking types excellent for attacking. But snipers seem less useful in a game with relatively short sight-lines. Each operator also comes with a basic range of unlocks to customise and improve their weapons.

So, there's a lot to get to grips with in the game's multiplayer, and on top of that you've got straight co-op against the AI, and even 'lone wolf' missions, which are great for just learning the game's basic mechanics or learning how the maps work – and if you really want to get the most out of the game, a certain amount of training is a real necessity.

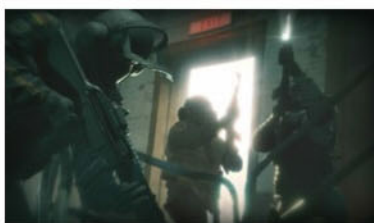
At its best, Rainbow Six: Siege is a taut game of strategy and counter-strategy. It can deliver some amazing tension, even without a single shot being



fired. You could be defending a hostage, listening to attackers move about above and below you, waiting to see where they strike; you may be quietly trying to get a shot at your target, without in turn being seen and fired upon. The game's sense of mobility is very impressive, especially with abseiling, where you can hang upside down above a window, before leaping out and in through a shower of glass, carefully shooting enemies with precise headshots.

It can also be supremely entertaining, truly laugh-out-loud, as plans fall apart and your entire team shrieks in alarm as your AI opponent does something truly unexpected, like actually walk out onto a ledge after you blow in a window.

But because of the deep learning required to get the most out of both the maps and the various operators, it can also be very frustrating. During



our review, we were up against people who had already had 50 hours of play in the beta, and the difference in skill was amazingly apparent. The game's reliance on very tight teamwork may also work against casual pick-up games, and if you're the apparent 'noob' in a team of experienced operators, you're likely not going to be very popular.

Regardless, Rainbow Six: Siege is a strong new offering for the franchise, and while the attempts to add personality to some of the operators may be a little baffling, it is at least nice to see a whole lot of women getting into the face-shooting, door-busting action. It's a game that offers tension and action by turns, with some deep strategies to master in terms of execution and teamwork.

But will it have legs? Only time – and a lot of bullets and busted walls – will tell. **DAVID HOLLINGWORTH**

## TACTICAL UI

1. Like many modern co-op games, tracking your team-mates is essential.

2. Keeping track of friendly and enemy numbers is also important.

3. Spectating is a handy way to see other operator types in action.

4. Scoping up is a reflex for most shooter players, but in Siege's CQB it can be a little slow.

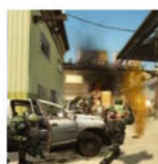
5. Barbed wire is a simple barricade, but it slows you down and makes a lot of noise.

## OR TRY THIS:



### INSURGENCY NEW WORLD INTERACTIVE, 2014

- ▲ Cheaper, and more expansive
- ▼ All the shades of brown



### RAINBOW SIX VEGAS 2 UBISOFT, 2008

- ▲ Still a classic
- ▼ Vegas is the worst place on Earth



### CS GO VALVE, 2012

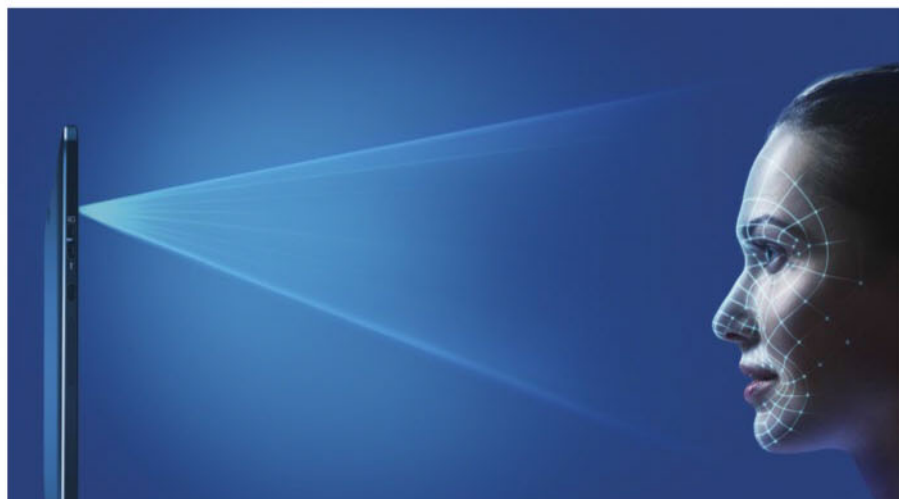
- ▲ A seminal shooter
- ▼ Most CS:GO players still sound like babies

## VERDICT:

Lots of fun, and the addition of destructible walls and defences really adds a new dimension to classic competitive gameplay.

**8**





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Giving the machine a set of 'human-like' eyes

Intel® RealSense™ technology is revolutionising the way we interact with our tablets, laptops and desktop computers. The RealSense system, with gesture-control, 3D-scanning and facial recognition will make using your device cleverer, and more human. Here's how it works.

The RealSense camera is actually three cameras in one; an Infra-Red camera, a conventional camera, and an Infra-Red laser projector. This combination allows it to scan objects sitting in front of the computer, such as your face. In this way all of your passwords can be replaced by your face, removing the hassle of remembering dozens of cryptic terms. Objects placed in front of the camera can be scanned and turned into accurate 3D models, a process that used to require expensive equipment and dedicated facilities. The camera can also track up to 22 points on each hand, allowing full gesture control like never before, including controlling onscreen items such as the cursor. Thanks to the camera's ability to measure distance, it can be used as a virtual "green screen",

> The HP Sprout PC uses Intel RealSense to see objects



replacing your background image when video conferencing with friends or colleagues.

A stunning example of how technology companies can innovate with RealSense is the HP Sprout PC. It projects a high-definition image onto the desk in front of the monitor, and the RealSense camera then allows the projected image to be manipulated by touch. In this way a designer can drag a photo from the monitor to the projected image on the desk, resize it and rotate it using hand gestures, and then pass it back to the display.

Even more spectacularly, the HP Sprout can use RealSense to scan a physical object placed in front on the PC. In just minutes a high resolution 3D file is ready for work.

## 6TH-GEN POWER

RealSense isn't the only big news from Intel. The latest 6th Generation Core processor family is the most powerful CPU design ever released by Intel, yet Intel's Core M mobile versions of the chip are also some of the most power-efficient, enabling all-day use on a single battery charge. Key improvements include a massive increase in graphics processing power thanks to the improved integrated graphics processor that is part of all 6th Generation Core CPUs.

With over 48 different variants of the new CPU expected, choosing the right one comes

down to just how much performance you'll need, as well as whether you're looking for a desktop or mobile chip. Today we'll focus on several major desktop versions. At the entry level, Intel's i3-6100 processor delivers dual cores, but still includes the company's

*"It has never been a better time to upgrade your PC to the Intel 6th Gen Core CPU"*

proprietary Hyper-Threading technology to simulate up to four cores. This chip includes the Intel HD Graphics 530, to power casual-games and crisp video playback.

Intel's i5 family is aimed at mainstream users who want the best balance between price and performance. The i5-6500 is a processor that foregoes Hyper-Threading but instead delivers four true physical cores, with a maximum speed of 3.6GHz. It too includes Intel HD Graphics 530. At the upper end of the spectrum is Intel's i7-6700 processor, which combines four physical cores with Hyper-Threading to deliver an additional four 'virtual cores'. A top speed of 4GHz makes this fastest chip in Intel's new family, while once again Intel's HD Graphics 530 integrated graphics processor is included. Serious enthusiasts will want to consider the K-series processors, which allow overclocking.

Regardless of which Intel processor you choose, rest assured that they've been optimised to work with Windows 10. Able to wake up in just 0.5 seconds from sleep, the average 6th Gen Core i7 CPU delivers up to 190% better productivity versus the average 2.5 year old PC. Support for new DDR4 memory equals faster application loading times, while the widespread adoption of high-speed storage on the new range of motherboards designed for this chip makes booting up faster than ever. And with integrated graphics performance up to 30 times better than a five-year-old PC, it's no wonder that now has never been a better time to upgrade your PC to the Intel 6th Gen Core CPU.





# PHANTOM-S

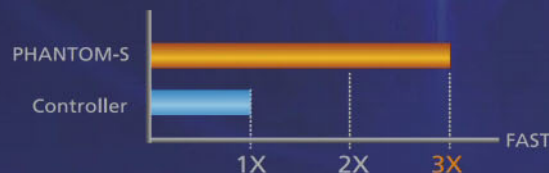
## GAMEPAD EMULATOR

Can't Aim and Shoot Fast Enough or Accurately When Playing FPS Games on PS4, PS3, XBOX 360 or XBOX One?

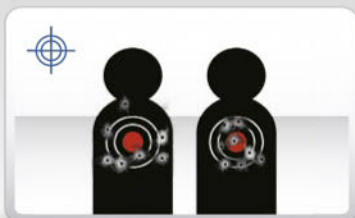
### PHANTOM-S™ IS THE ANSWER !

The PHANTOM-S™ uses signal conversion technology for advanced control during gameplay. You can abandon the conventional controller for FPS games to enjoy smoother movement, enhanced accuracy, customized controls and rapid fire with a PC keyboard and mouse.

The PHANTOM-S™ allows you to easily become a top FPS player with customized keyboard and mouse controls like you've never experienced. Whether you're a professional PC or console game player, the PHANTOM-S gives you the advantage.



#### Aim Better



Provides More Accurate  
Rapid fire

#### Regular Software Updates



Provides New Features and  
Boosts Performance

#### Unique Play Mode



Use a Laptop / Desktop keyboard  
to control your game console



More about PHANTOM-S™  
[www.aten.com/phantoms](http://www.aten.com/phantoms)

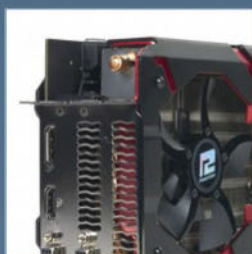


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[www.pccasegear.com](http://www.pccasegear.com)



# Tech<sup>247</sup>

## YOUR GUIDE TO PC GAMING HARDWARE



## Yule Love It

If you wait for the inevitable sales

**T**is the season to be jolly... jolly well impressed with the new hardware you've bought yourself for Christmas. Unless you're dating a super-nerd, the best way to ensure you get the kit you want is to buy it for yourself, or ask your relatives for cash so they can fund your December upgrade. And just in time for Christmas come some of the most expensive goodies we've reviewed in a long time.

Whether it's the \$600 router from D-Link that can probably be detected from Mars, or the \$300 audiophile-grade soundcard from ASUS that is clear enough to fool a bat's ears, this month sees a raft of incredibly expensive components hitting our review pages. For the most part they're actually deserving of their high price tags, but they're still not the kind of thing you buy all year round. I'm pretty sure the timing of their release isn't coincidental. For some reason us Westerners seem to forget about all of those debts and credit cards that scare us each month at this time of the year, and manage to scrape up the necessary funds to buy that special treat.

But savvy shoppers know the bargains are to be found a month later. January and Feb is when those high-priced items that didn't sell at Xmas just happen to get their first price cuts, to help clear shelves for the second quarter. Sure, feel free to buy that \$1300 video card this December if you absolutely have to, but bear in mind it'll probably be a heck of a lot cheaper a few months later...

And on that note, have a fantastic end of year celebration, no matter what you're celebrating. Remember it's a great time to get outside and see your friends and family, even if Fallout 4 is calling you back inside all the time. Take care, and until next year, peace out. GunSlingerAUS.

**Bennett Ring**  
Tech Editor

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Our Power Award is given to products that are best in class no matter your budget.



Our Smart Buy Award goes to products that balance performance with price tag.

## THE PCPP TESTBENCH

**CPU**  
INTEL I7 3770K  
[www.intel.com.au](http://www.intel.com.au)



**MOBO**  
GIGABYTE Z77X-UD3H  
[www.gigabyte.com.au](http://www.gigabyte.com.au)



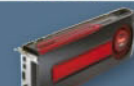
**SSD**  
CORSAIR NEUTRON  
[www.corsair.com](http://www.corsair.com)



**RAM**  
8GB PATRIOT DDR3 2,133MHz  
[www.patriotmemory.com](http://www.patriotmemory.com)



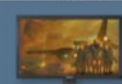
**GPU**  
RADEON HD 7970  
[www.amd.com](http://www.amd.com)



**PSU**  
CORSAIR AX860I  
[www.corsair.com](http://www.corsair.com)



**DISPLAY**  
DELL U2711  
[www.dell.com.au](http://www.dell.com.au)







## MOUSE

## Razer Mamba Laser Gaming Mouse RGB

Most. Expensive. Mouse. Ever.

PRICE \$220

[www.razerzone.com](http://www.razerzone.com)

**O**uch. \$220 for a gaming mouse. That's got to be a record, but it's no surprise to see that Razer is the company behind this ultra-elite gaming mouse. It's claimed to be the world's most advanced gaming mouse, but can Razer really justify such a stratospheric price when \$100 mice seem to be perfect already?

For this price, the Apple-like unboxing experience is to be expected – we couldn't help but think what an impressive gift this thing will make at Christmas, as it just reeks of dosh. Inside the huge case is the mouse and recharging stand – yep, this thing is wireless. Don't let your warning bells go off yet though, as it can also be run in wired mode. Within the box is the mouse, charging platform and a tiny screwdriver. Said tool can be used to adjust the force required to depress the main left/right mouse buttons, though we were very happy with the force straight out of the box. There's a surprising lack of extra buttons for this price though, with a mere two thumb buttons (suitable for right-handers only) along with two buttons to adjust the DPI. Finally the scroll wheel can be clicked down, and rocked to the left and right.

Plugging it in reveals the spectacular lighting system, which emits from RGB trails around the edge of the mouse, as well as the charging base. Serious lighting freaks will love the incredibly detailed light tuning options in the Razer software. It can also be calibrated depending on your mouse surface, but again we found our Corsair pad worked perfectly.

Where this thing shines is the 5G sensor used within. It's capable of a rather ridiculous 16,000 DPI, which is great if you're running several 4K screens but obscenely high for the rest of us. However, Razer claims it can also track in 1 DPI increments, versus 50 on other sensors, and it definitely lent the mouse an incredibly accurate feel. Shooters tend to require the most accurate movements, and we never found a single pixel of missed tracking in *Battlefront* and *BF4*. After coming from an optical sensor, we expected the laser sensor here to feel a little off, but no such problem existed.

Best of all though, this is one of the only wireless gaming mice we've used where detaching it from the USB cord didn't result in a laggy, sluggish response. We honestly couldn't pick the difference between wired and wireless

Where this thing shines is the 5G sensor used within. It's capable of a rather ridiculous 16,000 DPI

mode, which is a rather big deal. The battery life of 20 or so hours on battery isn't amazing, but shouldn't be an issue unless you regularly forget to plug it into the charging station, or game for 20+ hour stints, in which case you've got bigger problems than battery life.

We've criticised Razer products in the past for their high price compared to their relatively average feature sets, but we can't level the same complaint at the new Mamba. Yes, it's obscenely expensive, but it's arguably the best wireless gaming mouse currently available. **PC**

- Stunning 5G sensor
- Flawless wireless performance
- Beautiful light system

• \$220?  
• \$220!  
• \$220...

## VERDICT:

We'd recommend trying before buying in case you don't like the laser sensor, but this is our new favourite wireless gaming mouse

9





## LAPTOP

## Asus GL552

Asus' flagship brand on the cheap

PRICE \$2149

[www.asus.com.au](http://www.asus.com.au)

We've become accustomed to associating Asus' Republic of Gamers brand with the top tier of pricing, but it appears the company is now extending this to more affordable offerings. Take the new GL552 gaming laptop for instance; with a sticker-price just over two grand, it's damn cheap for a gaming laptop.

With a screen size of 15.6 inches, this laptop sits smack-bang in the middle of laptop form factors. Weighing 2.5kg it's heavy enough that you probably won't want to lug it around all day. The entire chassis is built from plastic, which helps to keep the cost and weight down, but doesn't inspire massive amounts of confidence regarding the build quality. At least it's a good looker, with the striking lines apparently meant to be reminiscent of the F-22 Raptor fighter jet.

At this price the use of an IPS panel is a welcome addition, as a poor screen is often the first way to cut costs on budget gaming laptops. It's got a nice rich colour tone with solid contrast

performance, while the matte finish makes it suitable for gaming in brighter environs. The keyboard is basically full-sized, and includes a numpad, both of which have a sexy red backlight. Given the fact that most gamers will bring their own mouse, the crappy touchpad is forgivable. Another nice inclusion is the single Type-C USB 3.0 port, which sits alongside a Type-A port of the same speed. A small removable port allows upgrading of the installed M.2 SSD, while the 802.11ac networking is another solid inclusion at this price.

Intel's shiny new Skylake i7-6700HQ is perfect for a gaming laptop, with its Hyper-Threaded quad-cores maxing out at 3.5GHz while gaming. This is paired with 8GB of DDR4 memory, which can be upgraded to 16GB if you're hungry for memory. The M.2 SSD that houses the OS delivers 118GB of usable space, yet our sample only had 76GB free out of the box due to the bloated collection of software that comes preinstalled. Thankful another 1TB mechanical drive

helps soften the blow of such a small main drive.

A gaming PC is all about the combination of CPU and GPU, and it's in the latter area where the GL552 exhibits its budget-orientation. NVIDIA's rather sluggish GTX 960M is tasked with pushing the polygons, and it only has a mere 2GB of dedicated memory. As our benchmarks show, it's just not up to the task of running even moderately demanding games at Ultra detail. Given that it's possible to pick up a similarly priced gaming laptop with the superior GTX 970M, we're afraid that the GL552's choice of the GTX 960M really hurts the overall performance. **PC**

- Affordable
- Good CPU and SSD
- Nice screen

- Poor GPU
- Plastic chassis

### VERDICT:

If only Asus had of gone with the GTX 970M instead, and jacked the price a little, we'd be much happier with the GL552

7

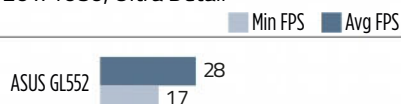
### GRID AUTOSPORT Benchmarks

1920 x 1080, Ultra Detail



### SHADOW OF MORDOR Benchmarks

1920 x 1080, Ultra Detail



### 3DMARK Firestrike





## LAPTOP

## Aorus X3 Plus v5

Aorus' delivers real gaming in a mobile package

PRICE \$3099  
www.aorus.com

Just because this Aorus laptop is opposite the Asus in this issue, please don't expect a direct comparison between the two. At a thousand dollars more, the Aorus is obviously a premium product, while Asus has gone for a more economical offering. And yet, many of the interior components are comparable, but the smaller size of the Aorus illustrates the price hike that occurs when shrinking a gaming laptop.

The X3 ships with a 13.9 inch display, but it's incredibly crisp thanks to the 3200 x 1800 resolution. However, it's not an IPS panel, instead using IGZO technology to deliver a wider viewing angle than cheaper TN panels. It's a good looker though, as expected for a three grand laptop. Despite the small size, Aorus has squeezed a series of macro keys onto the left of the keyboard.

Last year's X3 v3 chassis has been used again in the v5 edition of the laptop, which is by no means a bad thing given its entirely metallic construction. It's just 23mm deep with the screen down, and

the smaller form factor helps keep the weight down too, at 1.8kg.

There are plenty of USB 3.0 ports to go around despite the small size, with three Type-A and one Type-C. HDMI 2.0 out is another welcome inclusion, while a mini-Displayport rounds out the display options. We've recently changed our mind about Killer's e2400 Ethernet solution after putting it to the test, making it handy for those who want to download while still enjoying rock-solid gaming performance.

Once again we see the new Skylake i7-6700HQ processor in action, identical to the Asus, but the Aorus doubles the matching DDR4 memory to 16GB. Twin M.2 SSDs are included in RAID 0 mode, giving this thing absolutely blistering drive performance, but there's no mechanical drive for your larger media files.

Where the Aorus really departs from the Asus though is in regards to the GPU, packing a GTX 970M with 6GB of discrete memory. As you can see from the benchmarks, this has a huge impact

on performance, despite being only \$200 or so more expensive than the GTX 960M used in the Asus. It makes the Aorus truly capable of playing games at Ultra detail, though you'll need to stick to a resolution of 1920 x 1080; while the 3200 x 1800 display is nice, the GTX 970M doesn't have anywhere near enough grunt to run games at this resolution.

Overall the X3 Plus v5 does exactly what it says on the tin, delivering game-ready performance in a highly mobile form factor. It's possible to get nearly identical performance in 15.6" larger laptops for around \$500 cheaper, but your aching arms will thank you for the weight reduction offered by the X3. **PC**

- Lightweight
- Terrific screen
- Great performance

- Rather expensive

## VERDICT:

The latest version of the X3 continues to deliver excellent game performance at a fraction of the weight of competitors

# 8

### GRID AUTOSPORT Benchmarks

1920 x 1080, Ultra Detail

Min FPS Avg FPS



### SHADOW OF MORDOR Benchmarks

1920 x 1080, Ultra Detail

Min FPS Avg FPS



### 3DMARK Firestrike

Score







## GPU

# Powercolor Devil 13

This speedy devil gets hot and bothered

PRICE \$1149

[www.powercolor.com](http://www.powercolor.com)

When a graphics card includes a special mounting bracket to stop it shrugging free of the shackles of its PCIe slot, you can rest assured it's a behemoth. The new Devil 13 from Powercolor is one such heavyweight, with a slightly absurd weight of two kilograms. There's a good reason for all this extra baggage though, as hidden beneath the frankly gigantic heatsink is not one, but two AMD Radeon R9 390 processors. No wonder it costs so darn much.

Given the rather outrageous cost, the initial presentation of the product is a welcome sight. It's packed in a beautiful box that reveals two trays within, and it's all luxuriously padded in soft black rubber. Within the first tray is a rather strange sight, Razer's highly customizable and wireless Ouroboros mouse. Considering this normally sells for \$140 on its own, it's a rather expensive

addition to the package that many gamers would probably rather not have, as picking a mouse is a very personal choice. It also undoubtedly helps account for the stonkingly high price tag. Tucked away elsewhere in the box are the usual power connectors, driver CD, stickers and the aforementioned mounting bracket.

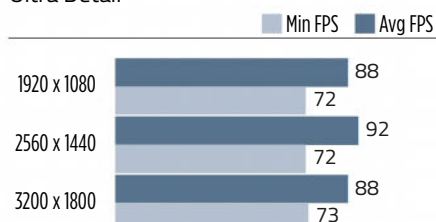
But we're here for the card itself, and what a behemoth it is. Measuring a lengthy 305mm, you'll need a rather spacious case to squeeze this beast in. It'll also knock out three of your expansion slots on the back of your case, with a chunky depth of 59mm. There's a reason it's so big – the R9 390 is a relatively hot little demon, so having two of them on one card requires a huge heatsink. Each GPU has a toasty TDP of 275W, so Powercolor has had to get creative when cooling two of

these. Rather than drop the GPU frequency as we've seen on other twin-GPU cards in the past, Powercolor has kept both GPUs with their standard speed of 1GHz. Instead the company has basically grabbed two standalone coolers, and merged them into one giant slab of heatpipes and fins. These are then cooled by three fans, each of which includes the usual set of blades along with a smaller set of blades that apparently add 20% to the cooling prowess of the card.

Just in case twin R9 390 GPUs aren't fast enough for you, Powercolor has also provided options for tweaking. The 15-phase power supply ensures a crisp, clean power supply, but you're going to need four 8-pin power connectors to provide it with enough juice. The box recommends a 1000W power supply as a minimum, but we managed to get it working

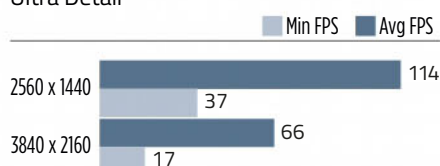
## GRID AUTOSPORT Benchmarks

Ultra Detail

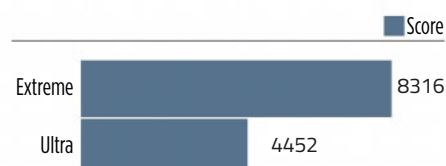


## SHADOW OF MORDOR Benchmarks

Ultra Detail



## 3DMARK Firestrike





fine with a Corsair RM850i. On the back of the card are a row of LEDs that indicate the power load, while a glowing Devil logo will pulsate through your Perspex case window. There's also a small button that allows tweekers to switch between one of two BIOS', just in case they push things too hard.

Given the inclusion of two GPUs, we have to admit that the range of outputs was a little disappointing. As expected given its AMD heritage, there's no sign of HDMI 2.0, with DisplayPort 1.2a instead used to deliver 4K resolution at 60Hz. There's also the usual twin DVI-I, and a single HDMI 1.4a... and that's it. Given how much space is on the rear plate of the card, and the inclusion of twin GPUs, it would have been nice to see a few extra outputs.

A whopping 16GB of onboard GDDR5 memory is included, but only 8GB is available to games, which is a current limitation of multi-GPU setups. In the far future DX12 might get around this issue, but until then even the 8GB frame buffer found here is more than enough. Unlike the GPU, the memory bus is running slightly slower than the speed of a single R9 390, down from 6Gbps to 5.4Gbps. We're not sure why, as it's usually the GPU that needs throttling

on dual-GPU cards due to heat reasons, and not the memory. Thankfully we were able to increase this during our overclocking tests.

Given the high specifications of this card, we threw a bunch of extra high-resolution tests at it, and it managed to blow them all away. Even 4K wasn't too much trouble in our Shadow of Mordor and Metro Last Light tests, though newer games like Battlefield will probably have to run at 2560 x 1440 to get reliable 60Hz+ performance. However, there is a cost for these levels of performance – fan noise. Even though it was running on an open testbench in a room with a 20C temperature, the cooler kicked out 66dB of fan noise under load, making it one of the noisiest we've ever tested. This got even worse when we then hit the overclocking options, hitting a maximum GPU speed of 1.1GHz and memory speed of 6GHz before starting to see instability.

Then there's the issue of value for money, but to be frank you don't buy this kind of product with an eye on your budget. Still, this thing is actually surprisingly within the realms of competitive pricing. The \$1149 price is recommended retail, so we

Even 4K wasn't too much trouble in our Shadow of Mordor and Metro Last Light tests

reckon it'll drop to around the \$1k mark pretty quickly, which puts it on par with two R9 390 cards at \$495 each. In fact, once you consider it's also got a premium mouse, the price is surprisingly good.

We're still a little perturbed by the incredibly high fan noise though – we're not ones to believe that a roaring helicopter in your case is conducive to immersive gaming. If you can live with that though, you'll find this to be a very capable card when compared to the likes of the GTX 980 Ti, which retails for the same price but will lag far behind.

BENNETT RING

- Surprisingly good price
- Extremely fast;

- Very loud under load
- Huge and heavy

#### VERDICT:

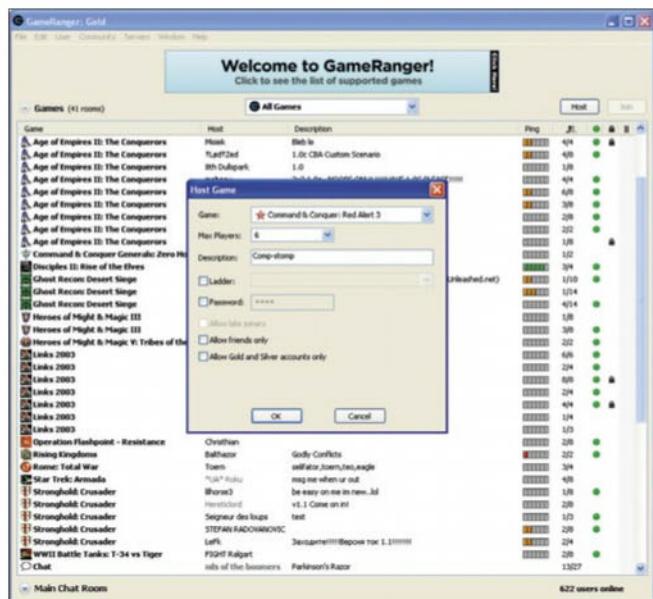
We're rather surprised at what excellent value this card is, easily outpacing Nvidia's similarly priced GTX 980 Ti... with the caveat of Crossfire support.

8



# TOP WINDOWS 10 GAMING APPS

We're guessing by now that you've taken advantage of Microsoft's free upgrade to Windows 10, and have been pleasantly surprised by how easy it was, not to mention how few of your existing programs it broke. We've spent several months with the Operating System, and while we love the improvements compared to the godawful Windows 8.1, there's still a few things that aren't quite right. Thankfully there are plenty of savvy software developers out there who have managed to make Windows 10 just the way we want it, so read on for our favourite seven applications that make Windows 10 sing.



## 7. Game Ranger

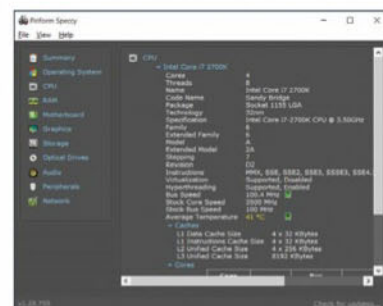
[www.gameranger.com/](http://www.gameranger.com/)

It's a fact of life that as our online PC games age, their multiplayer support often dies. This has gotten exponentially worse with the death of GameSpy and EA's continued slashing and burning of old servers, but one clever West Australian guy has come to our rescue. The developer of Game Ranger, Scott Kevill, has somehow figured out how to get these dead multiplayer games to work via his Game Ranger program. Whether it's racing mates in Grid, or fighting off those pesky Luftwaffe in the original Combat Flight Simulator, Game Ranger's support for several hundred obsolete online games is keeping your memories alive.

## 6. Speccy

[www.piriform.com/speccy](http://www.piriform.com/speccy)

Windows 10 includes a pretty comprehensive list of the goodies inside your PC, but it's spread around a few places – the device manager, About Your PC, and other places. Speccy solves this problem



by showing all of your hardware info in one easy to read location. Not only that, it also shows much more detail about your hardware, such as your CPU's and GPU's core temperatures, various voltage details and even the status of your hard drive's S.M.A.R.T. status. It really is a one-stop shop to get a total overview of your PC's hardware.



## 5. MSI Afterburner

[gaming.msi.com/features/afterburner](http://gaming.msi.com/features/afterburner)

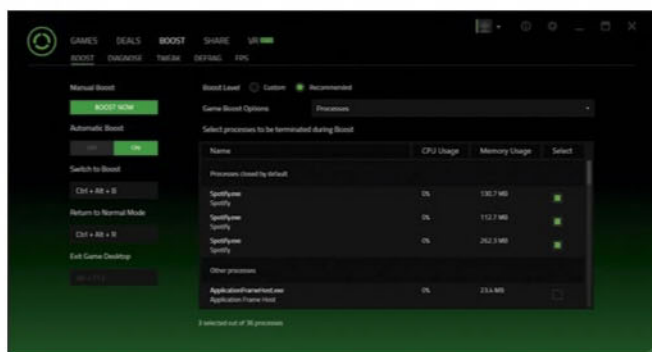
There's a reason most overclockers turn to MSI's graphics card tweaking software, regardless of whether they're running an MSI card or not. For starters, it'll run on any brand of graphics card, either AMD, Nvidia, Gigabyte, Palit, whatever. Not only does it make tweaking your GPU and memory speed easy, but it's got one of the best fan speed interfaces we've used, making it a cinch to set up custom fan profiles. It also looks sexy, with hundreds of user-made skins ready to download. And if you really want to put your overclocked GPU under pressure, the inclusion of the Kombustor burn-in tool will see just how stable that 300MHz overclock really is. There's also Predator video recording, but that's probably the weakest link in this package, as there are better video capture options out there.

Process	CPU	Private Bytes	Working Set	PID	Description	Company Name
csrss.exe	0.14	3,328 K	11,232 K	2159	Host Process for Windows S...	Microsoft Corporation
csrss.exe	0.14	11,756 K	18,128 K	3544		
csrss.exe	0.09	136,488 K	56,212 K	2285	csrss.exe	ANASIS Software
csrss.exe	< 0.01	11,884 K	25,636 K	2532	Spooler SubSystem App	Microsoft Corporation
csrss.exe		1,844 K	0,200 K	2710	Bonjour Service	Apple Inc.
csrss.exe		10,760 K	10,568 K	2724	Zero Install Store Service	Install.de
csrss.exe		1,228 K	5,620 K	2740	Adobe Acrobat Update Service	Adobe Systems Incorporat...
csrss.exe		1,372 K	4,488 K	2750		
csrss.exe	< 0.01	7,743 K	24,212 K	2779	Host Process for Windows S...	Microsoft Corporation
csrss.exe		3,188 K	11,416 K	2784	MobileDeviceService	Apple Inc.
csrss.exe		1,344 K	6,340 K	2792	AGS Service	Adobe Systems, Incorporated
csrss.exe		32,379 K	50,816 K	2812	Microsoft Office Click-to-Run	Microsoft Corporation
csrss.exe		1,392 K	7,184 K	2958	Epson Scanner Service (64bit)	Seiko Epson Corporation
csrss.exe		9,424 K	17,844 K	2972	Epson Customer Participation	SEIKO EPSON CORPORA...
csrss.exe		3,320 K	12,960 K	3004	NVIDIA GeForce Experience	NVIDIA Corporation
csrss.exe		4,204 K	10,560 K	3043	NVIDIA Network Service	NVIDIA Corporation
csrss.exe		1,992 K	6,456 K	3115	MyEpson Portal Service	SEIKO EPSON CORPORA...
csrss.exe		4,308 K	11,672 K	4030		
csrss.exe		10,296 K	43,620 K	5438	MyEpson Portal	SEIKO EPSON CORPORA...
csrss.exe		14,000 K	25,988 K	5520	Print driver host for applications	Microsoft Corporation
csrss.exe	0.01	10,752 K	38,772 K	5554	Host Process for Windows S...	Microsoft Corporation
csrss.exe	0.04	7,872 K	15,188 K	4440		
csrss.exe		10,240 K	8,348 K	4452		
csrss.exe	0.02	7,456 K	20,024 K	5448		
csrss.exe	< 0.01	1,372 K	5,060 K	5010		
csrss.exe	< 0.01	1,240 K	5,780 K	3198		
csrss.exe		1,376 K	6,064 K	3218	Device Information Provider	Sony Corporation
csrss.exe		3,360 K	12,912 K	3554	Host Process for Windows S...	Microsoft Corporation
csrss.exe		6,444 K	18,832 K	3550	Host Process for Windows S...	Microsoft Corporation
csrss.exe	0.06	2,228 K	6,652 K	3520		
csrss.exe		13,940 K	20,924 K	3600	intense Application	X-File Inc.
csrss.exe		1,344 K	6,180 K	4328	Host Process for Windows S...	Microsoft Corporation
csrss.exe		4,592 K	13,348 K	5504	Host Process for Windows S...	Microsoft Corporation
csrss.exe	0.01	61,204 K	87,284 K	7458	Microsoft Windows Search In...	Microsoft Corporation
csrss.exe		1,240 K	7,116 K	2912	Microsoft Windows Search Fi...	Microsoft Corporation
csrss.exe		1,430 K	6,324 K	12012		

## 4. Process Explorer

[technet.microsoft.com/en-us/sysinternals/processexplorer.aspx](https://technet.microsoft.com/en-us/sysinternals/processexplorer.aspx)

Windows 10's new and improved task manager looks the goods, giving you even more insight into what's running on your PC at any one time, but it pales in comparison to Process Explorer. The first time you fire up this application to see how many needless applications are sucking down your CPU cycles and memory space is actually a little terrifying – there's a whole lot more going down than Task Manager shows. Even better, it shows exactly how much CPU time and memory each app is guzzling, along with a detailed description and the name of the company who made it. Trust us, once you've seen the junk that Process Explorer exposes, you'll go on a bloatware cleaning spree that will make your PC noticeably faster. We found 20 different pieces of junk that had to go after firing it up just once!



## 3. Razer Cortex - Game Booster

[www.razerzone.com/au-en/cortex](http://www.razerzone.com/au-en/cortex)

Once you've seen how many insidious programs are eating into your game performance, your best bet is to track down their installations and uninstall their annoying asses. However, Razer's Cortex suite includes a Game Booster feature that will shut down any unnecessary processes automatically for you. It also includes a bunch of other cool features, such as automatically optimizing various Windows 10 settings, and even cloud saves like Game Save Manager. However, it also pushes Razer deals down your throat, but that's a small price to pay for such a useful application.

## 2. VLC

[www.videolan.org/vlc/download-windows.html](http://www.videolan.org/vlc/download-windows.html)

Oooh, look at Windows 10's shiny new movie player – it almost looks like it's not just trying to get you to buy videos through Microsoft. The problem is that it's a piece of junk compared to the World's Greatest Media Player™, otherwise known as VLC Media Player. No matter what kind of file you've downloaded or, erm, backed up, VLC will handle it with aplomb. It's also got hardware acceleration if you're running the right GPU or CPU, leading to a higher quality of video playback, and there are dozens of tools to help improve your movie experience.

Audio out of Sync?

Solved. Missing

subtitles? Try one of

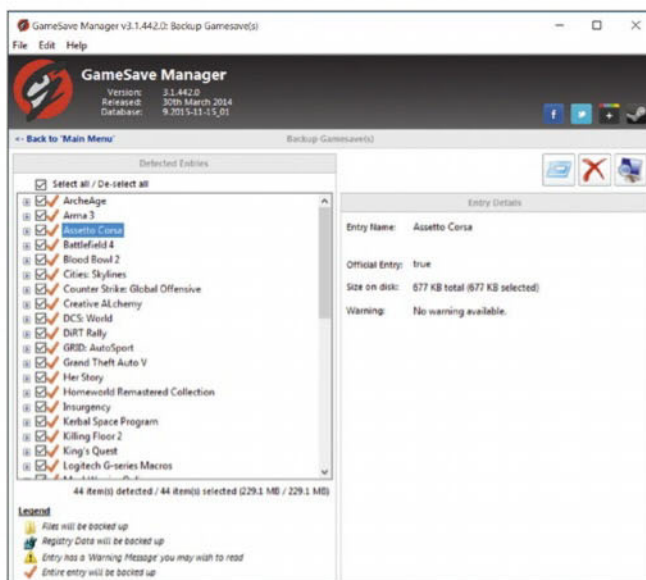
the VLC plugins. Once

you've gone VLC, you'll

never go back to the

one MS has shoved

down our throats.



## 1. Game Save Manager

[www.gamesave-manager.com](http://www.gamesave-manager.com)

The original game save backup application is still the best. Sadly the creator of this amazing piece has been a little ill of late, leading to a slowing down of the development of the program, but it still works wonderfully, albeit with a few quirks if you're doing weird things like saving your games on network drives. Basically it scans all of your hard drives for any game saves, and then backs them up either locally or to the cloud. It makes reinstalling Windows a total breeze, as you don't need to scour dozens of different message boards to find out where the cryptic game save location is for each of your favourite titles. Of course, if game developers actually bothered to use the Documents\My Games folder that Windows includes as a default save location, this wouldn't be necessary, but until then Game Save Manager is your next best bet. And yes, it even works with Steam, much more reliably in fact than Steam's somewhat temperamental cloud backup feature.





## SOUND

## Asus Strix Raid Dlx sound card

One for sound lovers

PRICE \$320

[www.asus.com.au](http://www.asus.com.au)

Despite onboard motherboard audio advancing in leaps and bounds, we still think that a dedicated sound card is a worthy inclusion for those who really care about their audio. Obviously the sound outputted by your system is going to be highly reliant on the speakers or headphones you use, but there's no point pairing a \$350 set of cans with a low-end motherboard audio codec. With a street price exceeding \$300, the new Asus Strix Raid Dlx is obviously targeted at the upper end of the audiophile spectrum, and demands a quality set of speakers or headphones to go with it.

The Dlx is actually the flagship model in a range of three new Strix cards from Asus, and it's got the best specs of the lot. Asus claims a Signal to Noise ratio of 124dB... which just happens to be identical to Creative's Sound Blaster ZxR, which is a similarly priced proposition. It does so by using top-notch components along with some of the most interesting EMF shielding we've seen. The ESS ES9016 D/A Converter is the same one found in some of Pioneer's dedicated home theatre amps, while Nichicon capacitors are used throughout. The chip that does the audio-processing is the Cmedia CM6632AX, which is rated to deliver

192kHz/24-bit audio. Interestingly this was initially designed as a USB 2.0 audio processor, but it's been moved onto a PCIe card in this product.

One of the biggest issues faced by soundcards is the fact they live inside a box pulsing with electromagnetic interference. This is why many audiophiles recommend an external sound solution (this author uses a Marantz amplifier connected via HDMI for this very reason). However, Asus has gone to great lengths to solve this, starting with a large EMI shield that covers most of the card. More intriguing is the use of a four-layer PCB – one layer carries the analog signals, which is then separated by two grounding layers from the final digital and power layer.

Sound outputs on the card come in the form of six 3.5mm stereo minijacks, one of which serves double duty as an SP/DIF output. There's also one last plug that connects to the Raid controller, a large dial that controls volume and four other settings – bass boost, mic volume, EQ and Virtual Surround. Installing the drivers for this setup was pain-free, a nice surprise, and the ability to tweak everything on one screen is welcome.

As expected, sound quality was fantastic when paired with a pair of

\$399 Audio Technica ATH-A900X headphones, and the headphone amp had no problems driving them. We couldn't hear the merest hiss of interference, even at high volume, and the virtual surround effect was especially noteworthy. However, sound quality when connected to speakers had one issue – there's no LFE cut-off point for the subwoofer, which could be an issue if you have a quality sub without its own LFE dial.

While we still think an external amp is the way to go, if you're looking for a relatively affordable high-end solution that fits inside your case, the Strix Raid Dlx knocks Sound Blaster's ZxR off its perch. Just bear in mind they demand to be paired with similarly expensive headphones or speakers, and many people will probably find the next model down to sound basically identical. **PC**

- Beautiful sound
- Relatively powerful headphone amp
- Handy volume dial

- No LFE control for subwoofer
- Rather expensive

## VERDICT:

This is the new king of discrete soundcards for gamers, though you're going to have to shell out more than you might like for one



## ROUTER

## D-Link Taipan DSL-4320L AC3200 Ultra Wi-Fi Router

Super-fast routing, now with added modem

PRICE \$578

[www.dlink.com.au](http://www.dlink.com.au)

We're big fans of Ethernet here at PCPP, as Wi-Fi tends to be flakier than a leper with dandruff. As more devices get loaded onto a Wi-Fi network, and nearby networks encroach on your radio waves, we've seen supposedly high-power devices fail over a range of less than ten metres. D-Link's new Taipan router aims to solve these problems by blasting out one of the fastest Wi-Fi networks ever offered to consumers. The question is – does it work?

The AC3200 designation indicates that this thing can churn out 3200Mbps of bandwidth – that's the equivalent bandwidth of three combined Gigabit Ethernet networks. As usual though, the devil is in the details. The Taipan actually pumps out three different networks – one on the 2.4GHz band with a speed of 600Mbps, and two on the 5GHz band, each with a speed of 1300Mbps. Add these up, and you get 3200. What this means is that no single device on the Wi-Fi network will get more than 1300Mbps of bandwidth; but it also means that more devices can connect to each of the three different networks without slowing down overall performance.

As you can see from the photo, this rather odd-looking router has six positional antennae, and these are used to deliver AC SmartBeam technology. Rather than blast the signal in all directions, it can detect where your devices are, and then direct the signal using the various antennae, even if the device is moving. Unlike most high-speed routers, D-Link has included an ADSL2+ modem inside the Taipan, which is a fantastic inclusion for the millions of Aussies stuck on this copper-based tech until the NBN rolls around. It'll still handle Fibre-to-the-Home NBN as well, as tested in our environment.

Heading into the interface reveals D-Link's superb user interface. It really is a favourite of ours, with just the basics revealed for casual users, yet advanced options are just a click away. The USB 3.0 port on the rear, next to another 2.0 port, allows the connection of a USB 3.0 drive, turning this into a NAS, while four Gigabit Ethernet ports are standard.

So just how fast is this thing? That really depends – while we tested it, our lab is in an inner-city suburb with around 15 other Wi-Fi networks within range. There's also the fact that our test laptop has a 2x2 receiver – to get maximum speed on the 5GHz channel

■ Rather than blast the signal in all directions, it can detect where your devices are, and then direct the signal ■

requires a 4x4 receiver, and these are still extremely rare. We recorded a speed of 427Mbps on the 5GHz channel, placing it in the same league as ASRock's new G10, which is also a 4x4 transmitter that is damn fast. Obviously there's plenty of spare bandwidth to go around, but unless you're connecting more than five devices simultaneously, you're probably not going to max out the Taipan. Finally, if you don't need the modem included in this unit, D-Link's DIR-890L/R offers basically the same performance and features for \$350, which is a considerable saving. **PC**

- Three high-speed networks
- Easy setup
- Excellent performance
- Requires 4x4 clients to reach top speeds
- Expensive

## VERDICT:

Whether you're loading this up with lots of devices, or have an eye on future performance, the Taipan bites just right

8



## STORAGE

# Crucial BX200 480GB SSD

Performance always comes at a cost

PRICE \$239  
www.crucial.com

They're still not in the same league as mechanical hard drives, but golly gosh SSD prices continue to plummet. The BX200 is the latest example of a super-affordable SSD, packing in almost half a Terabyte of storage for just over \$200. But as you'll soon see, there's a price to be paid for such affordability, and we're going to use this review as a cautionary tale for some of these budget SSDs.

This drive is the successor to the BX100, Crucial's very successful budget model from earlier this year. However, the new drive has made the jump to TLC (triple-level cell) NAND memory for the bulk of its storage. The problem is, TLC is pretty darned slow compared to the SLC memory better drives use, delivering speeds of just 80MB/sec, a huge drop. Now Crucial claims the BX200 can deliver 540MB/sec of sequential reads,

so how on Earth can this drive do so? The secret is in the 6GB high-speed cache that this drive ships with. This is controlled by the new Silicon Motion SM2256, and basically acts as a tiny SSD within a larger, slower SSD.

Provided your file sizes are well under the 6GB size of the cache, the BX200 will indeed deliver close to those speeds. However, try copying a 10GB file and you'll see speed plummet to 75MB/sec or so, which is an order of magnitude slower than competing SSDs. Considering it's possible to get 480GB drives that don't have this limitation for roughly the same price, such as the SanDisk Ultra II, and this hidden flaw makes the BX200 very hard to swallow. **PC**



- Budget pricing
- Large capacity
- 3 year warranty

- Speed plummets when file sizes exceed 6GB

## VERDICT:

It might be rather easy on the wallet, but its inability to deal with large file sizes puts this drive at a severe disadvantage.

6

## MEMORY

# Geil Super Luce DDR4 Memory 3000MHz (2 x 4GB)

DDR4 done right, done cheap

PRICE \$137  
www.geil.com.tw

Now that Skylake and its hunger for high-speed DDR4 memory is here, it's time to ditch those shabby old DDR3 modules and upgrade. The thing is, at Skylake's default memory speed of 2133MHz, it's not actually that much faster than DDR3 in real world scenarios. Enter kits like this one from memory masters Geil, which promises an easy 3000MHz frequency, without costing the Earth.

Considering most 2133MHz kits with twin 4GB sticks cost around \$130, the fact that Geil can deliver such speedy memory for the same price is simply incredible. Factor in the weak Aussie dollar, and we're not sure how the company is doing it. Installing the kit into our Skylake testbench was easy enough, though the modules are rather high, something worth bearing in mind if you've got an overly large heatsink. It's partially due to the pulsing lights on

top of the memory, that pulses faster as the temp increases. We immediately hit the 3000MHz memory ceiling with utter ease. Even better, the timings to do so remained relatively tight, at 15-17-17. You can buy a faster kit that'll do the same 3000MHz overclock at 15-15-15, but we're not sure how much it'll cost.

Once again Geil has delivered the goods. This kit is fast, affordable and looks damn sexy. Best of all, if our experience is anything to go by, extracting the maximum performance out of this memory kit and hitting its 3GHz memory speed won't take hours of tweaking – just whack it in, change the timings and away you go. **PC**



- Very fast
- Great price
- Cool lighting design

- Very high heatsink

## VERDICT:

We're not sure how Geil did it, but this kit combines blazing performance with rock-bottom pricing.

10

## TABLET

# Microsoft Surface 4 Pro

A most beautiful non-gamer

PRICE \$3,399 (i7; 512GB SSD; 16GB RAM)  
[www.microsoftstore.com/au](http://www.microsoftstore.com/au)

You won't buy this as a gaming machine; it's just too expensive compared to buying a real gaming laptop with a proper GPU. But if fortune smiles upon you and you possess the stunningly designed and manufactured Surface 4 Pro, take heart that it can do games – as long as you have an i5 or i7 model with the better integrated Intel graphics.

The unusual native res is 2736x1864, but if you need to drop that to gain frames it holds up better than most, retaining a crisp and sharp look down to around 1440x900 or so. At that res, a playable 40fps can be expected from Battlefield 4 at low detail.

Fan noise is an issue when the CPU is loaded, but it's not ear-piercing in pitch and is surprisingly bearable for long periods. The noise that matters more comes from the hidden speakers and

it can be so good at times it's startling. It's clear, has some power behind it, too, and holds up very well at full volume.

Assuming you also have the Type cover, the plus is the new and wider glass trackpad, however even the springier keys, much improved from the Surface 3, aren't up to the task of twitch gaming.

None of this should be a surprise. The Surface 4 Pro is a work machine – a very beautiful work machine – and it can be purchased in many greatly varying configurations. At the high end the i7 with 512GB of SSD (NVMe, no less) is the one to have for mobile gaming, but \$3,580 (inc keyboard) is a foolish spend when smarter alternatives are abundant. **BEN MANSILL PC**



- Beautiful screen
- Extremely powerful for a tablet
- Can play games

- Extremely expensive
- Type cover is extra

## VERDICT:

A hugely desirable, but equally expensive tablet cum laptop replacement.

8

## MOUSE

# Roccat Kiro

True ambidexterity

PRICE \$89.95  
[www.roccat.org](http://www.roccat.org)

Over the last year or so, German peripheral developer Roccat seems to have turned a corner, going from a very flashy design philosophy to one that is based around subtlety and clever features. The new Kiro mouse is a fine example of this new philosophy. It's a clever, great looking mouse that emphasises comfort and button placement thanks to its modular design.

Built to be truly ambidextrous, the Kiro utilises a similar modular approach to the excellent Roccat Nyth, but instead of reconfiguring the size and placement of thumb buttons users can instead choose on which side of the mouse these buttons fit by swapping out magnetic side panels. It's an extremely smart design that makes the mouse equally useable and

comfortable in either hand. Of course, if you're a fan of having pinkie buttons as well, you can always have buttons on both sides. More options for placement and size are available if you have access to a 3D printer.

Under the hood the Kiro sports a 2000 dpi optical sensor. This number may not be as large or flashy as some other sensors boast – some mice can sport 16000 dpi sensing and beyond – but even so, the accuracy and speed of the mouse is still excellent. The scroll wheel is nice and firm and has a good click to it, as do the left, right and thumb buttons. The result is a great, comfortable and surprisingly cheap mouse that should suit most users, left or right handed. **DANIEL WILKS PC**



- Clever modular design
- Very comfortable
- Elegant

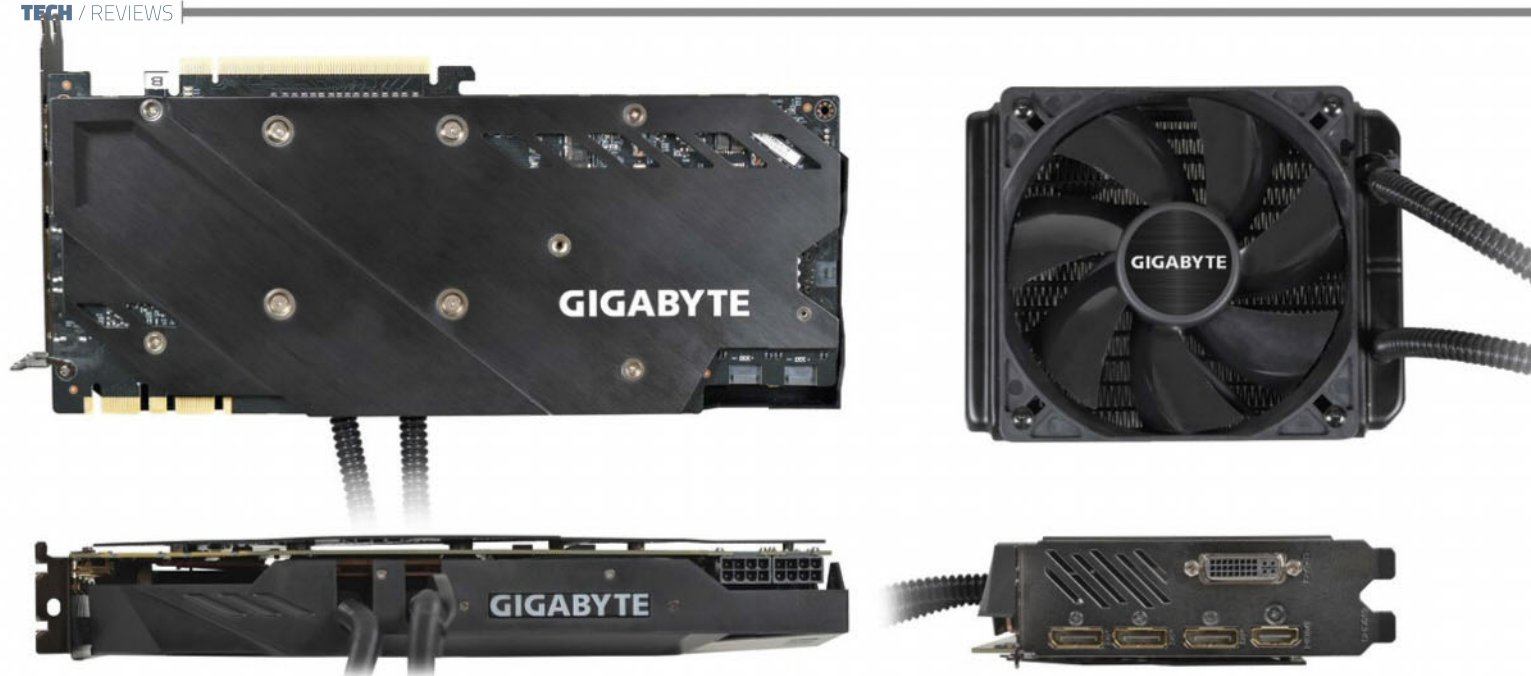
- Not the most powerful optical sensor around

## VERDICT:

An extremely comfortable, cleverly designed mouse at an all but unbeatable price.

9





## GPU

# Gigabyte Geforce Gtx 980 Ti Xtreme Gaming Waterforce (GV-N98TXTREME W-6GD)

The best just got even better

PRICE \$1249

[www.gigabyte.com.au](http://www.gigabyte.com.au)

Our current favourite high-end GPU is undoubtedly Nvidia's GeForce GTX 980 Ti. It's basically as powerful as a Titan-x GPU for \$500 cheaper, whips AMD's Fury x into a bleeding little pile of chunks, and does it all without sounding like there's a hairdressing salon in your PC. One of our favourite versions of the Gtx 980 Ti is Gigabyte's Windforce 3, but they've just released a new model that goes one better – the horribly named GV-N98TXTREME W-6GD. Let's see why this is quite possibly the sexiest graphics card for those with money to burn, yet a fetish for water.

Looking at the product picture reveals the obvious change from the Windforce. It's out with air-cooling, and in with an All-in-One water cooling solution. Gigabyte has aptly named this the Waterforce solution, and it covers the GPU, memory and even the power circuitry. This is hooked up to a 120mm fan, which Gigabyte claims is silent. Ditto with the

water pump that is housed within the water block on the card, which Gigabyte also claims is a low-volume model. We'll let our sound-meter put that to the test.

Given the high price of this product, we wish Gigabyte had followed the example of Powercolor when it came to packaging. While the box is huge, it's filled with the usual low-grade packing material and plastic cover found on \$200 cards. When you're spending \$1200+ on a GPU, it's nice to feel like it's money well spent. The only extra found in the box is, wait for it, a Gigabyte-branded sweat band for your wrist. Oh well, perhaps they had to keep the fluff down to keep the cost reasonable.

Checking out the card itself, it's quickly apparent that Gigabyte has done a whole lot more to this than simply grab its air-cooled Gtx 980 Ti and slapped a water cooler on it. For starters, there's now a large heat-plate on the rear of the card, likely to help support the new

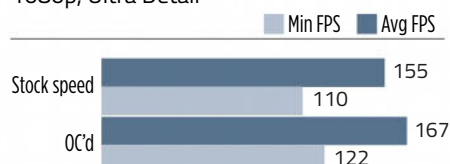
cooler. The cooler itself is incredibly sexy, with a Perspex window showing the heat-pipes and water-block inside. The window is also ringed by an RGB light, which can be customised via the Gigabyte OC Guru software. It's just a shame that once the card is mounted in a PCIe slot, this window will be invisible.

Gigabyte claims that it has binned the GPUs to be used for this card; this is the process whereby a manufacturer sorts all of its chips based on their maximum possible overclock speed. They've also endowed this bad boy with Samsung memory, which is some of the best on the market, and helps to explain why the memory overclocks quite well.

Liquid Nitrogen lovers will appreciate the inclusion of a special LN2 BIOS. This is activated by depressing a button on one edge of the card; we'd be rather careful about accidentally hitting this if you're sticking with the stock water cooling. A 12+2 phase power

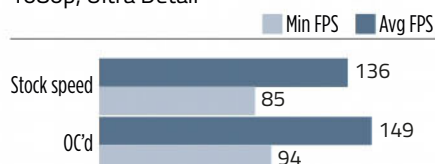
## GRID AUTOSPORT Benchmarks

1080p, Ultra Detail



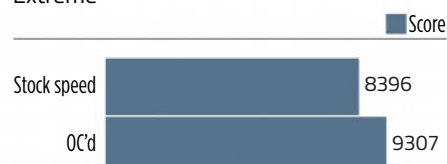
## SHADOW OF MORDOR Benchmarks

1080p, Ultra Detail



## 3DMARK Firestrike

Extreme





system ensures rock solid power supply, and Gigabyte has used the same chokes and capacitors as those found on the Titan. There's even an extra 6-pin power plug along with the usual twin 8-pin plugs for those who want to go hard. A couple of tiny LED indicators sit next to the main 8-pin plugs, and will start flashing if the card detects any abnormal power issues. It's a neat touch, but once the card is in your case it's unlikely you'd ever notice them, so is targeted more at test-bench tweakers. Gigabyte claims the PCB itself is coated in an aerospace-grade material, a claim we've seen from a few high-end GPUs of late.

All of these changes combine to deliver a card that is clocked much higher than a standard GTX 980 Ti. The original default version from NVIDIA comes with a base speed of 1000MHz and a Boost of 1075MHz. In comparison, this water-cooled baby comes with a base speed of 1216MHz and a Boost of 1317MHz. Not too shabby, but it's worth pointing out that Gigabyte's original Windforce version,

which is air cooled, has a boost speed of 1190MHz, which isn't far behind. The memory on this card has been given the tiniest nudge as well, increasing from the standard speed of 7GHz to 7.2GHz.

But where this card should shine is when it's pushed even further by overclockers, and that's exactly what we tested. Sadly though, once again we see Nvidia's restrictive voltage regulations in effect. It's only possible to increase the GPU voltage by a meagre 87mV, which is basically nothing. We cranked it straight to the max, and then set to work overclocking.

We managed to hit a maximum stable GPU speed of 1573MHz, a rather tasty increase of almost 20%. Unfortunately the memory didn't fare quite as well, topping out at 7.7GHz before benchmarks refused to run. As you can see from the benchmarks, this helped generate a noticeable boost in game performance.

While the overclock results alone are very impressive, what totally blew us away was the fan noise, or lack thereof. With the card at default speed,

■ All of these changes combine to deliver a card that is clocked much higher than a standard GTX 980 Ti ■

we measured a fan noise of just 41dB, which is basically indistinguishable from the rest of the system noise. Yet when we overclocked the card, the fan noise didn't increase by a single decibel, staying locked at 41dB. This is simply unheard of, even in water cooling land.

Considering this product is only \$100 or so more expensive than stock standard GTX 980 Tis, we have to give it a roar of approval. With some of the best overclocking results we've seen, while remaining quieter than basically any card we've tested, this is the GTX 980 Ti to buy. **PC**

- Excellent overclocking results
- Super quiet
- Reasonably priced

- Fancy packaging would be appreciated at this price

#### VERDICT:

Gigabyte has hosed away the competition with its water-cooled take on Nvidia's excellent GTX 980 Ti

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# HOTWARE<sup>247</sup>

with Terrence Jarrad

## 01 Musterbrand Star Wars Collection

Price: \$300 • Distributor: Musterbrand  
[www.musterbrand.com](http://www.musterbrand.com)

Look, we know we keep harping on about Musterbrand stuff, but it's only because it's all extremely cool gear. And it's not our fault they keep releasing great new clothes all the time!

**POWERED UP:** Limited edition Star Wars inspired jackets, for men and women. Obviously the Sith jacket is where it's at, with the imperial symbol patch, the pin tuck detailing giving that cyber/futuristic garb effect, and asymmetric design.

**PLAYED OUT:** The force awakens your wallet. Then the force chokes it to death.

## 02 Wipebook

Price: \$5+ • Distributor: Wipebook  
[wipebook.com](http://wipebook.com)

Possibly one of the most lo-fi pieces of tech we've shown, the Wipebook is a union of whiteboard and notebook.

**POWERED UP:** The pages are coated to allow whiteboard pens to write on them, and be erased again, thus doing away with the need to own a paper notebook ever again. Useful for school, meetings, lectures, doodling on the train, whatever! Can also be branded with company logos etc, if that's your bag.

**PLAYED OUT:** Not great if you want to keep your scrawl, we suppose, but when has that happened?

## 03 Nuzzle

Price: \$300 • Distributor: Nuzzle  
[hellonuzzle.com](http://hellonuzzle.com)

With the funding target on IndieGoGo already reached, the Nuzzle is set to ship out in March 2016. It's a GPS collar for your pet, or that one friend who wakes up in strange places after a night out.

**POWERED UP:** No monthly tracking fees, just tracking of position, activity, temperature, and also collision detection (which hopefully is never triggered). You can even "geo-fence" an area to get an alert if your little furry buddy wanders outside it!

**PLAYED OUT:** Like most GPS collars, it's a little bulky which makes it a little awkward for cats and small dogs, and it's US only for now.

## 04 Golden Apple

Price: \$NA • Distributor: Love Hulten  
[www.lovehulten.com](http://www.lovehulten.com)

A replica and modernisation of the Mac 128k both, the Golden Apple by Love Hulten is a piece of art.

**POWERED UP:** Inside the American walnut wood shell sits the components of a Mac Mini, with a DVD reader instead of a floppy drive, and an LCD screen instead of CRT. The accompanying mouse is wireless, also made from walnut, and the keyboard uses blue cherry MX switches and the key caps are plated with gold.

**PLAYED OUT:** Only one made, and not actually for sale, so maybe petition Love Hulten if you really want to spend a ridiculous amount of money on an Apple recreation.

## 05 Saver

Price: \$100+ • Distributor: Safety iQ  
[mysafetyiq.com](http://mysafetyiq.com)

If you're obsessive about fire safety, or afraid of SWAT teams throwing gas grenades into your house, the Saver Emergency Breath System could be for you.

**POWERED UP:** Triple filters remove smoke, dust, and toxic gases (zombie contagion?) from the air as you inhale. Meanwhile a light and an alarm will alert responders to your location for the promptest possible rescue.

**PLAYED OUT:** It's a specific scenario solution: unable to escape a house fire, but able to survive as long as you can breathe. Otherwise the time it takes to put one on might be better spent fleeing.





Need a hand tweaking, cooling,  
overclocking, benchmarking,  
optimising and game-making?



The **PC PowerPlay** AUSTRALIA'S #1 PC GAMING MAG  
**Technical Handbook**  
has you covered.

ON SALE JANUARY 21



# MENAGERIE

It's nearly Christmas.  
Don't you think  
you deserve a new  
gaming rig?

## BUDGET

The perfect entry-level gaming PC

### CPU

**AMD FX-4300 Quad Core**  
3.8GHz 4 Core Black Edt.  
**\$145** [www.amd.com](http://www.amd.com)

We're sticking with AMD's budget beauty.



### MOBO

**ASRock 980DE3/**  
**U3S3 AM3+**  
**\$69** [www.asrock.com.au](http://www.asrock.com.au)

Our CPU needs a new ASRock home.



### RAM

**Gell 8GB Kit DDR3 Evo**  
**Veloce C9 1600MHz**  
**\$85** [www.gell.com.tw](http://www.gell.com.tw)

In with the cheapest we can find



### VIDEO

**PowerColor R9 380**  
**PCS+ 4GB**  
**\$349** [www.sapphiretech.com](http://www.sapphiretech.com)

AMD's new 960 killer



### POWER

**Cooler Master**  
**Thunder 500W**  
**\$66** [www.coolermaster.com](http://www.coolermaster.com)

The budget beast doesn't need a lot of juice



### SOUND

**Sennheiser HD201**  
**+ ASUS Xonar DG**  
**\$38 + \$33** [www.sennheiser.com](http://www.sennheiser.com)  
[www.asus.com.au](http://www.asus.com.au)

Headphones plus soundcard – yes!



### OPTICAL

**Lite-on DVD-RW**  
**\$49** [www.us.liteonit.com](http://www.us.liteonit.com)

We'd happily retire the drive, but some of you guys still believe in physical media.



### STORAGE

**Toshiba DTO1ACA050**  
**500GB HDD**  
**\$59** [www.toshiba.com.au](http://www.toshiba.com.au)

Half a Terabyte should handle everything.



### DISPLAY

**Samsung 24"**  
**S24D300H**  
**\$189** [www.samsung.com](http://www.samsung.com)

Crystal clear 1920 x 1080 res gaming



### CASE

**BitFenix Shinobi**  
**\$95** [www.bitfenix.com](http://www.bitfenix.com)

Nice for the price. This is the little brother of the case used in our Performance build.



### KEYBOARD

**Tt eSPORTS Challenger**  
**\$49** [www.thermaltake.com.au](http://www.thermaltake.com.au)

Built for PC gamers.  
Macros, shortcuts, the lot.



### MOUSE

**Gigabyte M6900**  
**\$26** [www.gigabyte.com.au](http://www.gigabyte.com.au)

A sensor resolution of 3200DPI will make your headshots count.



**TOTAL: \$1,232**

## PERFORMANCE

Most bells and whistles, without breaking the bank

### CPU

**Intel 5th Generation**  
**Core i5-6600K +**  
**Noctua NH-D15**  
**\$350 + \$115** [www.intel.com](http://www.intel.com)



### MOBO

**ASUS Z170 Pro**  
**Gaming**  
**\$270** [www.asus.com.au](http://www.asus.com.au)

Our fave affordable Z170 board



### RAM

**Gell 16GB DDR4**  
**2400MHz**  
**\$175** [www.gell.com.tw](http://www.gell.com.tw)

Sweet, sweet DDR4.



### VIDEO

**Galaxy GTX970-4GD5**  
**\$499** [www.galaxytechus.com](http://www.galaxytechus.com)

NVIDIA's mid-range card is perfect



### POWER

**Corsair VS650**  
**\$85** [www.corsair.com](http://www.corsair.com)

This affordable PSU delivers a clean and reliable source of energy.



### SOUND

**Audio Technica**  
**ATH-A500X**  
**w/ASUS Xonar DG**  
**\$159 + \$33** [www.audio-technica.com](http://www.audio-technica.com)



### OPTICAL

**Lite-on DVD-RW**  
**\$49** [www.us.liteonit.com](http://www.us.liteonit.com)

This is the one bit of kit that stays the same between most of our machines.



### STORAGE

**W.D. Caviar Black 1TB**  
**+ Samsung 850 EVO**  
**250GB \$109 + \$165**  
[www.wdc.com/](http://www.wdc.com/) [www.samsung.com.au](http://www.samsung.com.au)



### DISPLAY

**BenQ XL2411T**  
**\$379** [www.benq.com.au](http://www.benq.com.au)

BenQ's 24-inch not only looks great, it'll also save your eyesight with a 144Hz refresh rate.



### CASE

**Fractal Design Define R5**  
**\$159** [www.fractal-design.com](http://www.fractal-design.com)

Our new favourite mid-tower.



### KEYBOARD

**Logitech G710+**  
**\$139** [www.thermaltake.com.au](http://www.thermaltake.com.au)

Logi's new mechanical board is one for them to beat.



### MOUSE

**Logitech G502**  
**Proteus**  
**\$59** [www.logitech.com](http://www.logitech.com)

Deadly accurate and super comfortable.



**TOTAL: \$2,745**

## PREMIUM

Crank everything to Ultra, including your credit limit

### CPU

**Intel 6th Generation Core**  
**i7-6700K + Corsair H110i**  
**GT Water Cooling Kit**  
**\$469 + \$169** [www.intel.com](http://www.intel.com)



### MOBO

**Gigabyte Z170X-**  
**Gaming 7**  
**\$369** [www.gigabyte.com.au](http://www.gigabyte.com.au)

Skylake boards cost a tad more, tis fact.



### RAM

**G.Skill DDR4-3200**  
**16GB Dual Channel**  
**Ripjaws \$209** [www.gskill.com](http://www.gskill.com)

3200MHz for our Premium PC



### VIDEO

**2 X Gigabyte GeForce**  
**GTX 980 Ti 6GB**  
**\$2040** [www.gigabyte.com.au](http://www.gigabyte.com.au)

Welcome to the world of Ultra High Detail.



### POWER

**Corsair HX1000i**  
**\$299** [www.corsair.com](http://www.corsair.com)

A high end PSU to ensure stable overlocks.



### SOUND

**Audio Technica**  
**ATH-ADG1 headphones**  
**\$249** [www.audio-technica.com](http://www.audio-technica.com)

We've ditched the soundcard



### OPTICAL

**Pioneer Optical Disc**  
**Drive (ODD) Internal**  
**Blu-ray Combo Drive**  
**\$118** [www.pioneer.com.au](http://www.pioneer.com.au)



### STORAGE

**W.D. Caviar Black 1TB +**  
**Samsung SSD 850 EVO**  
**500GBGB \$109 + \$305**  
[www.wdc.com/](http://www.wdc.com/) [www.samsung.com.au](http://www.samsung.com.au)



### DISPLAY

**ASUS PB287Q 28"**  
**4K display**  
**\$739** [www.asus.com.au](http://www.asus.com.au)

4K is now a reality



### CASE

**NZXT Switch 810 Full**  
**Tower \$185** [www.nzxt.com](http://www.nzxt.com)

It's big, it's beautiful, and it's also nice and quiet.



### KEYBOARD

**Corsair K70 RGB**  
**\$235** [www.corsair.com](http://www.corsair.com)

This is PCPP's favourite keyboard, case closed.



### MOUSE

**Logitech G502**  
**Proteus**  
**\$69** [www.logitech.com](http://www.logitech.com)

Deadly accurate and super comfortable.



**TOTAL: \$5,564**

RT-AC87U Red  
Wireless Gigabit Router



# THE BEAST

When overkill is barely enough...



## CPU

Intel 6th Generation Core i7 6700K  
+ XSPC RayStorm D5 RX240 V3  
Water Cooling Kit

**\$469 + \$587**

[www.intel.com](http://www.intel.com)

[www.pccasegear.com.au](http://www.pccasegear.com.au)



## HEADPHONES + SOUND CARD

Audio Technica ATH-ADG1  
headphones

**\$249**

[www.audio-technica.com](http://www.audio-technica.com)

Plug these into the Marantz amp for maximum  
sound quality.



## MOBO

MSI Z170A XPower  
Gaming Titanium Edition

**\$499** [www.msi.com](http://www.msi.com)

Sexy, silver and super fast.



## STORAGE

2 x Samsung SSD 850  
PRO 2TB, 2 x WD 1TB  
Velociraptor

**\$1000 + \$1000**

[www.wdc.com](http://www.wdc.com)

[www.samsung.com](http://www.samsung.com)



## RAM

G.Skill DDR4-3200  
16GB Dual Channel  
Ripjaws

**\$209** [www.gskill.com](http://www.gskill.com)

3200MHz is good for the Beast too.



## DISPLAY

Epson TW9200W

**\$3800**

[www.epson.com.au](http://www.epson.com.au)

Beautiful 1920 x 1080 gaming. Unfortunately you  
won't be able to do 3D gaming at anything higher  
than 720p due to the limitations of HDMI 1.4.



## VIDEO

2 x MSI GTX 980 Ti  
Lightning SE

**\$2458** [www.msi.com](http://www.msi.com)

The Lightning is faster than a Titan. True.



## CASE

Cooler Master Cosmos II  
Ultra Tower

**\$379**

[www.coolermaster.com](http://www.coolermaster.com)

It's big, it's beautiful, and it's also nice and quiet.

The compartmentalised interior ensures everything runs ice-cool.



## POWER

Silverstone  
1500wST1500 Strider

**\$315** [www.silverstone.com](http://www.silverstone.com)

1500W should be plenty for the three GPUs  
running alongside an overclocked CPU, as well  
as the storage within.



## INPUT DEVICES

SteelSeries Sensei RAW optical +  
Xbox 360 USB Wireless Dongle +  
Xbox 360 wireless controller

**\$69 + \$40 + \$40**

[www.logitech.com](http://www.logitech.com)



## KEYBOARD

Corsair K70 RGB

**\$235**

[www.corsair.com](http://www.corsair.com)

This is PCPP's favourite keyboard, case closed.



## STEERING WHEEL

Fanatec ClubSport Wheel  
base, Formula Carbon and  
CSP v2 Pedals

**\$589 + \$239 + \$329** [www.fanatec.de](http://www.fanatec.de)

There's nothing better than "Germangeering" to deliver  
the most precise force feedback around.



## SPEAKERS

Paradigm Cinema 110 with dual  
subwoofers and Paradigm  
monitor center channel

+ Marantz SR5009 amp

**\$3299**

[www.eastwoodhifi.com.au](http://www.eastwoodhifi.com.au)



## JOYSTICK

Logitech G940

**\$385**

[www.logitech.com](http://www.logitech.com)

This Force Feedback set is getting  
harder to find, but it's still the  
finest flight controller around.



## OPTICAL

Pioneer Optical Disc Drive  
(ODD) Internal Blu-ray  
Combo Drive

**\$118** [www.pioneer.com.au](http://www.pioneer.com.au)

Putting in a Blu-ray drive allows it to  
double as a powerful media box.



## COCKPIT

Obutto oZone with Butticker  
gamer 2 and TrackIR 5 Pro

**\$1100**

You're going to need somewhere to mount your wheel and  
joystick, and the Obutto frame is a favourite of ours.



**TOTAL: \$17,408**

Dual-band data rate of 2334Mbit/s  
Ultra-fast 802.11ac Wi-Fi router  
Smooth 4K/UHD video playback

**ASUS**  
No.1 in Quality & Services  
- The Wall Street Journal Asia





## How Things Work

# LAWN MOWER MAN

**ASHLEY MCKINNON** reads from the book of Jobe



Early 2016 sees the release of several Virtual Reality (VR) devices to the market heralding the next big step forward in gaming, and computing in general. These products promise an experience that will put you into the game, so let's take a look at just how these VR devices work and what they'll do for us.

VR products fall into two distinct categories – Virtual Reality and Augmented Reality (AR). VR is where the person is shown a virtually generated environment designed to trick them into thinking they are actually in that environment (this is what the Oculus Rift type device does). AR is where the user wears a device (i.e. glasses) that projects virtual objects into the wearers' field of view, making them think the objects are part of their natural surrounding environment (this is how the Microsoft Hololens works).

Here we will be focussing on the VR side of things – specifically the Head Mounted Devices (HMD) such as the Oculus Rift.

An HMD is worn on the head by a user and completely covers both eyes, blocking out all outside light and vision. Two small displays provide the visuals to each eye. With the displays being so close to the eye the field of view is quite large. Another device keeps track of where the users head is pointed and if the user turns their head or moves forward / backward, it is tracked and the image that the person sees will change to reflect this movement. All of this is done in near real time so the sensation of being immersed in the visuals you are looking at is very convincing. That's the quick and nasty explanation – now we delve into the details.

When a person puts on an HMD they have two small single OLED screens – one for each eye (just to be technically correct though – the development versions of the Oculus Rift (DK1 and DK2) utilised a single screen showing two images side by side – with a dedicated lens for each image).

Sitting between the eye and the screen is a lens used for focal adjustment, which allows the person to focus in on the images. Each image is angled slightly different to each other which then creates a stereoscopic image. This stereoscopic image fools the viewer into thinking the image has depth

and perspective. Stereoscopic imagery has been around for a long time and I'm sure many of you will have used an old View-Master – or watched a 3D movie wearing the weird red and blue coloured paper glasses – same basic principal – just the technology now is a lot more powerful.

Of course still images are one thing – but for gaming and video we need moving images. Refresh Rate refers to how quickly the images on a screen are updated, and most modern monitors and TV's are capable of 60Hz and greater. This means that the image on the screen updates 60 times per second – and with an HMD, it has been shown that 60Hz is a bare minimum. Lower than 60Hz and the wearer starts to get disorientated with what they are viewing and can start to feel sick. 90Hz seems to be optimum – with many of the new HMD's coming to market sticking to this – with some capable of 120Hz.

Field of view (FOV) needs to be mentioned as well. Like in real life we don't just see what is directly in front of us – we have peripheral vision. This is a job for the HMD lenses which take a flat image and curve it to fill up our field of vision. Between 90 and 100 degrees FOV has been shown to make a 3D image believable to a person wearing a HMD. Anything less and the person will see hard flat edges and the immersion will be lost.

All of this counts for nothing if the user can't interact with the environment they are immersed in. Motion tracking allows the users movements to be captured and reflected in what they see. Turn your head to the left and within the game or virtual environment your view will change as if you turned your head there. Play a game like Project Cars and you can turn your head to see the car passing you up the inside – just like you can in real life.

This is achieved using an Infra Red (IR) camera. The camera – usually mounted in front of the user – continually monitors the location of the HMD, where it moves and in what position it is in. This type of tracking allows for 6 degrees of movement tracking (up, down, left, right, in and out). In our example with Project Cars you could move your head forward to get a closer look at the car dials to



read your speed – or turn your head right around to look at the backseat of your car.

To make this appear realistic the tracking and display changing needs to be done very quickly. Latency is the time difference between when the user moves, that movement being detected and when the image the user sees replicates that move. VR wouldn't be very convincing if you turned your head and it took a couple of seconds for your view to catch up – it would be both disorientating and frustrating to say the least.

Early VR systems had high latency which is why the technology has taken a while to gain momentum. Today's technology allows for latency rates of 20ms or better – which is near

**The huge crowd sourced success of the Rift essentially kickstarted the current VR craze**

## ■ Sitting between the eye and the screen is a lens used for focal adjustment ■

undetectable to the average person wearing an HMD. Latency and Refresh Rates work hand in hand with each other because to get the best VR experience you want to get both of these as low as possible.

The Oculus Rift (due for release Q1 2016) is probably the most talked VR device at the moment, but several other HMD devices are coming to market as well including the HTC Vive (co-developed with Valve) and Sony's Playstation VR (previously named Project Morpheus). Looks like fun times ahead. **PC**



# PCPP COMPS

Welcome to the PCPP competitions page! With the office positively overflowing in PC gaming goodies, it's become so difficult to do our ridiculously awesome jobs that we decided to pass the savings onto you. And by savings, we mean free stuff. Games, collectibles, swag, and all kinds of media that screams PC gaming. Or perhaps those are the screams of the intern trapped under the boxes of giveaways. Only one way to save them: Head to [www.pcpowerplay.com.au](http://www.pcpowerplay.com.au) to enter!

To find the competitions, simply mouse over the "Community" tab in the main menu at the top of the homepage, and click on "Competitions". Click through to each individual competition page, fill out the form (be sure to agree to the terms and conditions) and you'll be in the running to win! Keep an eye out for this page in future issues of PCPP, as we roll out new competitions every month!

WIN



## American Ultra

Ever wanted to see Jesse Eisenberg as an action hero? Now's your chance. Eisenberg plays a stoner slacker trying to publish an indie comic book who turns out to be a highly trained sleeper agent for a clandestine organisation. It's all very strange, bloody and silly. Even Kristen Stewart is likeable in the movie. How about trying to win a copy?

### TO ENTER:

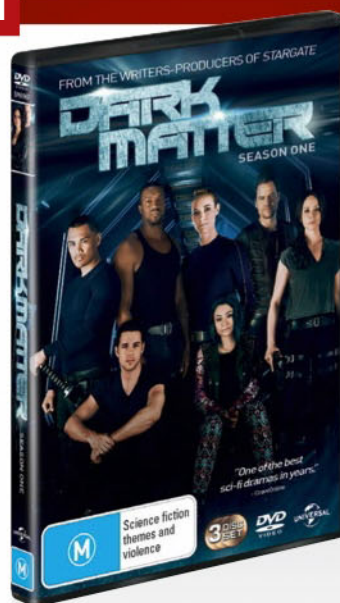
Head to [www.pcpowerplay.com.au](http://www.pcpowerplay.com.au)  
In 25 words or less, answer the following question:

▶ *What agency are you a sleeper agent for and why?*

10

BLURAYS TO BE  
WON THANKS TO  
ROADSHOW

WIN



## Dark Matter

Six strangers wake up on a spaceship with no knowledge of how they got there or even who they are. The only other inhabitant of the ship is an android. Naming themselves in the order they awoke - One through Six - the amnesiac crew must discover who they are, who wiped their memories and whether they even want to become the people they were before. It's good stuff.

### TO ENTER:

Head to [www.pcpowerplay.com.au](http://www.pcpowerplay.com.au)  
In 25 words or less, answer the following question:

▶ *What Sci-Fi series needs to be remade and why?*

10

DVDS TO BE  
WON THANKS TO  
UNIVERSAL

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XBOX PLAYSTATION NINTENDO PC MOBILE

# HYPER



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We ask renowned game devs what games they consider a must play

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## The 15 most amazing looking cancelled projects

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- Round-trip Transfers between Ngurah Rai International Airport, Bali and Komune Resort & Beach Club valid for two
- Complimentary dinner for two at Komune Resort & Beach Club restaurant

Set on the lush and unspoilt East Coast of Bali, **Hotel Komune Resort and Beach Club** is blessed with a hypnotising view of the world famous Keramas surf break. The resort is conveniently only 50 minutes away from Ngurah Rai International Airport. With its pristine volcanic beach, this 4 star beachfront Bali resort offers a wonderful experience of spending leisure time in a natural luxury hotel. Sumptuously appointed accommodation with artistic furniture, this unique Bali resort articulates the identity of the Island of the Gods.

In 2015 Hotel Komune launched its new Health Hub facility at the Bali resort after recognising demand from guests for further health and wellness experiences. The Health Hub features a yoga centre, 25m training pool, functional training centre, day spa, health café and fitness centre.

For more information, visit [www.komuneresorts.com/keramasbali](http://www.komuneresorts.com/keramasbali)



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Locked Bag 3355,  
St Leonards NSW 1590**



# S IN BALI!



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E-mail address:

*Please provide phone or email in case of delivery issues*

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No.

Expiry: / Name on card:

CVV: Cardholder's signature:

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Name: Mr/Mrs/Miss/Ms

Address:

Postcode:

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E-mail address:

\*T-shirt offer available to Australian and New Zealand residents only. Expires 20/01/16. Prices include GST. Savings based on total cover price. Overseas Airmail 13 Disc issues AS\$189. Please allow 6-8 weeks for separate delivery of your free T-Shirt. A PC PowerPlay subscription comprises of 11 issues of PC Powerplay and 2 special issues per year. This form may be used as a tax invoice. nextmedia Pty Ltd; ABN 84 128 805 970. Ball competition open to Australian and New Zealand residents over the age of 18. One entry per Eligible Product Purchase, defined in full terms. Competition opens 02/11/15 at 12:01 AM and closes 14/02/16 at 11:59 PM. Winner drawn 23/02/16 at 11:00 AM at nextmedia Pty Ltd, Level 6, Building A, 207 Pacific Highway, St Leonards NSW. The total prize pool valued at up to \$9000 (incl. GST). Winner notified by email or mail and published online at [www.mymagazines.com.au](http://www.mymagazines.com.au) from 23/02/16 for 28 days. The Promoter is nextmedia Pty Ltd (ABN 84 128 805 970) of Level 6, Building A, 207 Pacific Highway, St Leonards NSW 2065. Authorised Under: NSW Permit No. LTPS/15/08513. ACT Permit No. TP 15/07891. SA Licence No. T15/1934. Visit [www.mymagazines.com.au](http://www.mymagazines.com.au) for full terms and conditions. Please tick if you do not wish to receive special offers or information from nextmedia or its partners via ☐ Mail ☐ email. Refer to [www.nextmedia.com.au](http://www.nextmedia.com.au) for full Privacy Notice.

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# Opining on Opinion

JOSHUA LUNDBERG never gets the scoop

As gaming has exploded, so too has gaming journalism. Well, writing about gaming.

Having worked in the media, with some excellent journalists covering a number of areas, I must admit I'm frequently disappointed by what I watch, hear and read when it comes to gaming.

I'm no journalist. I write opinion pieces. I have occasionally written reviews, but I think they've generally been quite poor. I am besotted with gaming and technology; I have a lot to say and I read constantly about new developments in technology and gaming. Another job of mine is media production, and I am lucky enough to spend time talking to both technical and thought leaders in technology. I get to hear about what's next and how it can be used, and I'm almost always thinking – at the back of my mind – how gaming could be impacted by the future of hardware and software.

I don't, however, investigate when something seems awry. I don't call people for answers. I don't work to protect readers. I don't struggle to balance the fine line between sponsorship and independent, objective writing. I don't set the tone of a publication through leadership and vision.

I've never had a scoop.

As consumers, we all have something to say about what we consume, whether it be films, comics, videogames or food. We all have opinions, because we're all humans.

Having studied journalism at university it's interesting to see how the industry overall has morphed and shifted over recent years; tabloid and 'click-bait' have become normalised. Flowery and exhausting writing has been accepted as a form of legitimate journalism (although I suspect this is the result of an abundance of creative writing courses). The upside down pyramid of information seems to have vanished for the most part, and people like me writing things like this have become rife.

Unless, of course, that's what you want. You. Readers.

Personally I like writers who delve deep. Who avoid the flowery and who are willing to take commercial risks in the

interest of objectivity. We've seen careers derail when such risks were taken.

Aside from the basic skill sets of a journalist, these ethical boundaries, professional and personal risks, are what separate us, the reader, and the bloggers and the writers, from them.

When you've worked alongside journalists you'll hear their stories of hardship when integrity comes into question, and taking the high road often leads to a longer path toward success.

Why all this is particularly important in the world of gaming is the articles, reviews and opinions you read affect your opinions, your purchasing decisions and the way in which you use your spare time.

The responsibility of people in the gaming media is immense, in my opinion. The misrepresentation of an issue through poorly constructed

“ The only reason this isn't the case with gaming sites is, as always, analytics. ”

arguments can lead to 'controversies'.

Responsible publications support communities and acquire feedback on their work, and that's becoming commonplace. Good journalists engage in rational discussions on Twitter and other platforms and argue based on fact, without resorting to, 'hwell, thou art not one of us, thou shan't expreseth an opinion, o' unsightly pleb'.

That's important work. At the same time I feel like unpopular opinions - even nuanced agreements with qualification - on issues such as reviews, free hardware and software for journalists, curated review experiences, equality in gaming and other issues, can see hive-like mentalities appear.

Sharp criticism and disagreements from editors and writers in the comments; hyper-defensive reactions and failure to moderate overzealous supporters of the writer by mods or editors.

Critiques of the gaming media are frequent, but often ignored, especially in light of the bitterly disappointing hijacking of a profoundly important series of discussions by GamerGate.

It is valid to oppose and dismiss anything abusive, derogatory or accusatorial – but it's important to confront the messy nature of the relationship between the journalists, the bloggers, the publishers, the developers, the games conferences, and so on.

I think there is a confusion between journalism as a service and responsibility - with all the boundaries that go with it - and the fostering of gaming and gaming culture communities.

I don't think they are possible to foster in exactly the same places.


I think it's improper for a journalist who has written about the abuse of refugees in Nauru to respond to criticism of their article unless it's in the form of an article. If it's been printed you obviously stand by it based on facts represented in the piece, and if a response is necessary it shouldn't be in the comments section or on social media – it should be in the same form as the original piece.

I think a publication can do thorough investigative work and regular reporting, but I think there should be a hard line between this and efforts to foster community. It's complicated, and I don't have any particularly useful suggestions, but you'll notice that on many world news websites comments are disabled on many articles. The community simply need not be involved.

The only reason this isn't the case with gaming sites is, as always, analytics.

With comments you can see a community, with a community you have a regular audience, with a regular audience you have people you can sell to. And that's absolutely valid. That formula pays for you to read the works of talented people.

For much of the industry, however, it also complicates affairs and ensures the creation and publication of mediocre work. Note, I don't point anyone out here, because there's some saying about kettles and pots or something. It's this



way for anything that's monetised through advertising, but there are always standards.

A key problem, as with many industries, is saturation. As demand for content outpaces the reasonable ability to generate quality content, we see a gap.

There are slow news days. Weeks. Months. Yet, in these times the demand doesn't decrease. You don't want less gaming news - you look for gaming news every day, because you want it.

Yet, sometimes there isn't enough to give and that's where - overwhelmingly - opinions, top-ten lists and YouTube embeds come into play.

I'm a part of that, so don't think I'm not aware of the hypocrisy when I raise the issue. Anyone with an opinion and the contacts to be published can be published. Occasionally I received feedback on my work where it's meant something to a person, or been given kudos in the tech press, but as someone who is constantly searching to better their work - as I do constantly with my film and media production - I ask is this good enough? Am I not simply another writer who is blasting my thoughts into the crowded galaxy of gaming commentary? Undoubtedly - no, admittedly - the quality of my content fluctuates significantly, and I only write an article a month. It happens because I'm not a journalist. I don't snoop. I don't sniff out. I won't ever have a scoop.

Opposition is healthy. Feedback is healthy. Demand of your writers, YouTubers, twits and... Instagramer...fiers(?) the quality you expect. Be reasonable in your feedback and address problems you see in the gaming media with rational, fact-based criticism and you can help improve it.

It's likely there'll be less room for people like me, but if that helps improve the calibre of what we read, then that's just evolution. Make your media better. It is, after all your media - made for you. **PC**



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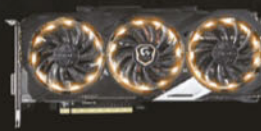
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